June, 1959

Two Men Do Work of Eight

Better Sales, Product With Autoclaving

Panel, Block Saves 75% Erection Time

CONCRETE

For producers of concrete block, precast and prestressed concrete products and ready mixed concrete

Keep YEARS AHEAD TOMORROW

WITH ANY

GOCORP "SUPER" TRUSTEE

Hydraulic GOCORP "TRUSTEE"

NO DRAWING BOARD DREAM BUT THOROUGHLY FIELD TESTED—THE BIG, HEAVY DUTY, 3 at a time, PLAIN PALLET, "SUPER" TRUSTEE IS READY TO GO TO WORK FOR YOU NOW!

CONSIDER THESE FACTS!!!

- **HIGHER PRODUCTION**—Up to 1100 good blocks per hour, with many aggregates, without abusing the machine.
- **TOP QUALITY BLOCKS**—Fewer culls in production • Fewer rejects on the job • Variable cycle—for complete flexibility and constant control of quality • Accurate height control.
- **LOWER MAINTENANCE**—Hydraulic operation means fewer wearing parts • Smoother operation • The elimination of cams, cam followers and gears means big maintenance savings for you.
- **QUICK MOLD CHANGE**—Change full height molds in about 20 minutes—to other heights in about 30.
- **RUGGED CONSTRUCTION**—Heavy duty frame with heavy plate cross bracing — Heavy duty bearings — 5" dia. cross shafts • The "Trustee" is built to last.
- **NO BRAKE FAILURE**—"Trustee" vibrator motors are 10 HP plug reversing type • Designed for frequent stops and starts • No brakes to cause trouble.

Both the "SUPER" TRUSTEE and the new economy model, TRUSTEE "SPECIAL" (also a 3 at a time), will accommodate, without alteration, molds of the majority of plain pallet machines now in use. You can have all the advantages of the modern hydraulic TRUSTEES and protect your mold investment too!

AND THAT'S NOT ALL - *Ask about these other fast selling hydraulic TRUSTEE models:*

TRUSTEE "SPECIAL" ..... 3 at a time economy model
TRUSTEE 2½X ..... up to two 10 x 8 x 16" units per cycle and other combinations
TRUSTEE 2X ..... up to two 8 x 8 x 16" units per cycle and other combinations

IT COSTS LESS TO OWN A GOCORP . . . .
. . . . BECAUSE VALUE IS A GOCORP PRODUCT

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COLUMBIA CALCIUM CHLORIDE IN CONCRETE SAVES TIME, INCREASES PROFITS

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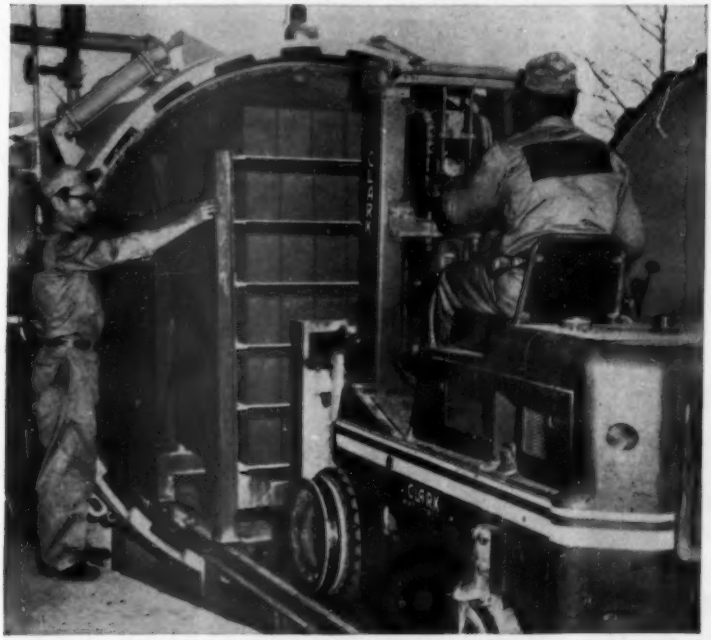
IN READY MIX

Want to build more business this summer? Here's one easy way. Suggest adding Columbia Calcium Chloride to your customers' orders. Columbia Calcium Chloride cuts both initial and final set time by two-thirds. At 70°F, seven-day early strength is reached in just 3½ days. Ultimate strength tests higher, too. Your customers benefit by being able to remove forms quicker, get finishers on and off the job faster, reduce overtime and keep the job moving on schedule. Columbia Calcium Chloride presents no handling problem . . . it can be added equally well at your plant or on the job site. You'll find your customers will appreciate the savings in time and money they get with Columbia Calcium Chloride as an admixture. And they'll appreciate your recommending it.



You get better concrete products at lower costs.

IN CONCRETE PRODUCTS

In the production of concrete products, time is money. You save *both* when you add 2% Columbia Calcium Chloride by weight of cement to the mix. Columbia Calcium Chloride cuts time of initial set by two-thirds; develops three day strength in just 24 hours. You may save time by reducing the lengths of pre-steam holding, steaming and soaking periods. Higher early strength upgrades quality by reducing product breaking, chipping, and cracking during early handling. Large stockpiles can be eliminated since finished products are produced faster, can be shipped quicker. Save time and money. Increase your profits by adding Columbia Calcium Chloride to your concrete mix. Order Columbia Calcium Chloride today from your nearest Columbia-Southern distributor.

Write today for more information. Please mention whether interested in ready mix or concrete products.

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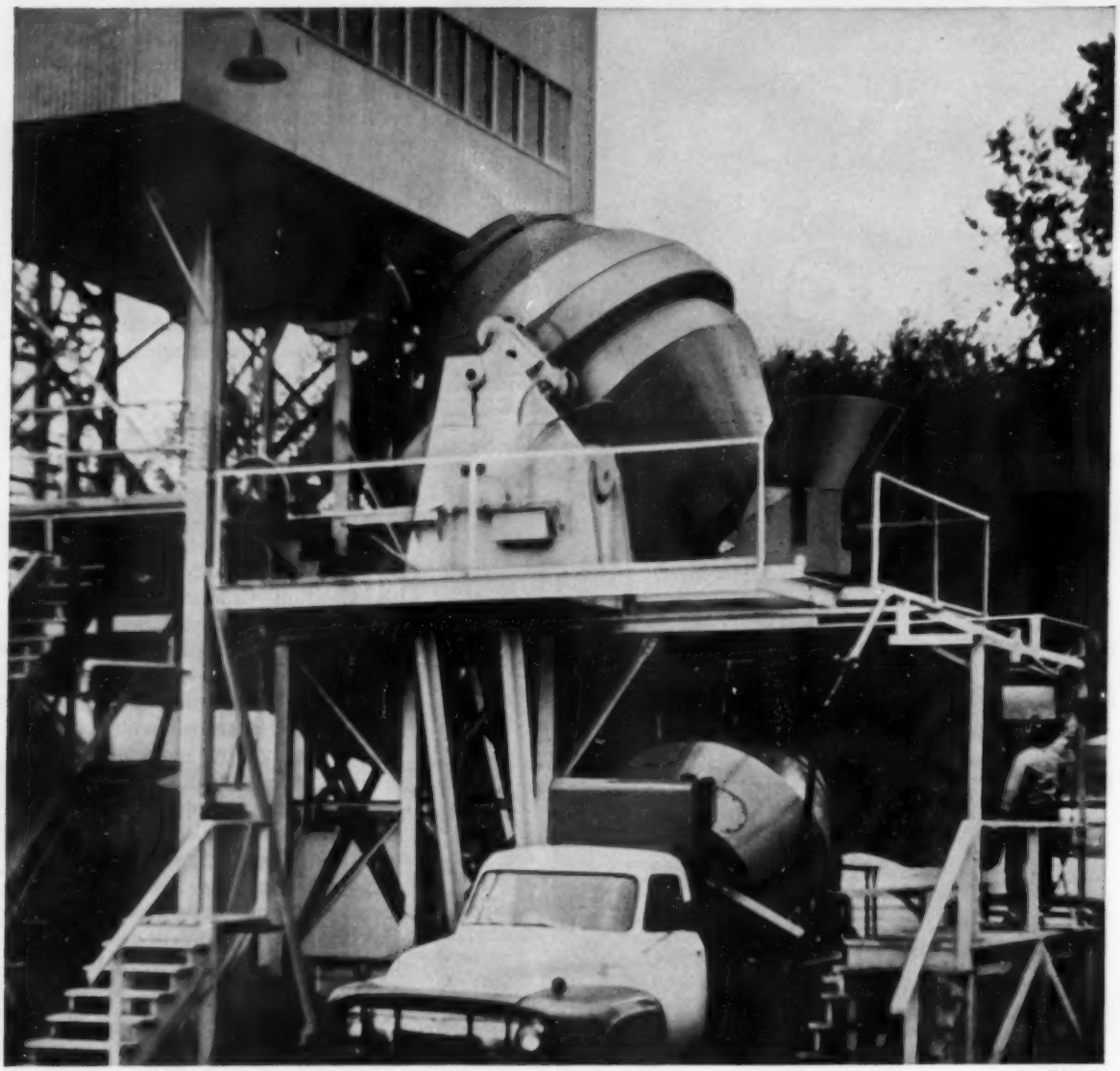
Each year more and more quality-conscious engineers are specifying critical concrete. *You* can meet this demand by premixing with Smith Tilters —by depending on one quality-trained plant man instead of 20 or 30 truck drivers.

You'll find that premixing isn't a luxury — it's an economy!—and it will quickly pay for itself in increased quality, business and goodwill. What's more, it will save you money and lengthen the life of your fleet by reducing wear on truck mixers, which will only have to run at agitating speeds.

The superior mixing action and sturdy construction of Smith Tilters — from 2 to 10 yards capacity—have made them the standard of the ready mix industry. Ask your local Smith distributor for proof — or write us direct for more information.



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JUNE 1959

CONCRETE

For producers of concrete block, precast and prestressed concrete products and ready mixed concrete

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FEATURES FOR THIS MONTH

DONALD T. PAPINEAU
Publisher

JACK ANDERSON
Editor

G. E. LEICHT
Circulation Manager

DEPARTMENTS

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ARE HIGH COSTS EATING AWAY YOUR PROFITS?

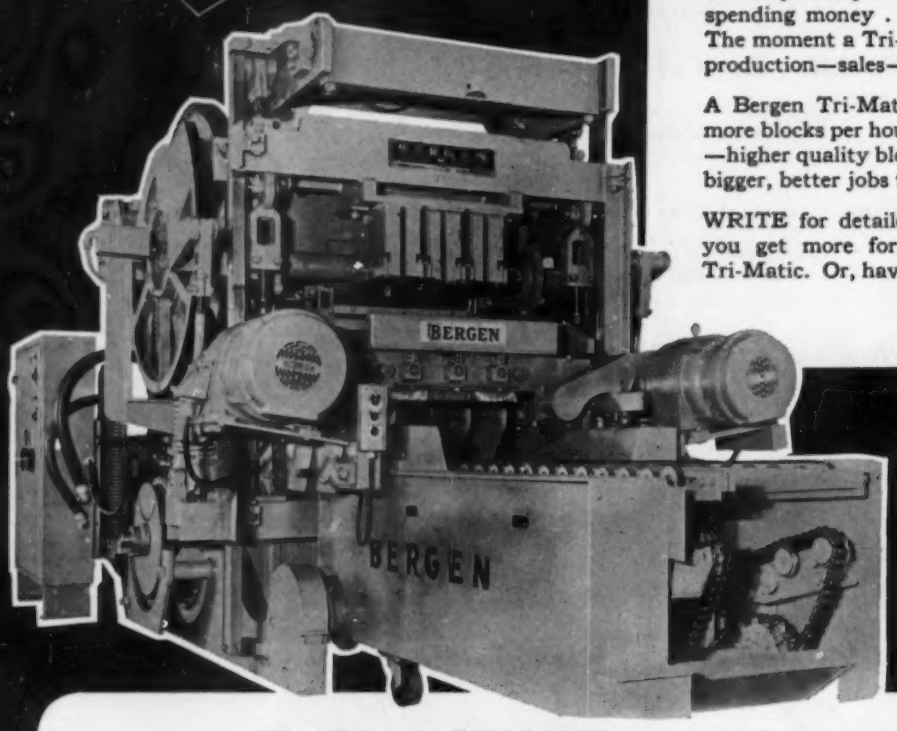
Install a BERGEN TRI-MATIC

for dependable, high-volume, low-cost block production

When you buy a Bergen Tri-Matic, you're not spending money . . . *you're making money!* The moment a Tri-Matic begins operating, your production—sales—and profit picture improves.

A Bergen Tri-Matic quickly pays for itself in more blocks per hour, per day—low maintenance—higher quality blocks—more profit per block—bigger, better jobs to quote on and sell.

WRITE for detailed literature explaining why you get more for your money in a Bergen Tri-Matic. Or, have a Bergen engineer call.



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- *Unsurpassed High Production*—can exceed 6 mold cycles per minute, producing 1000 to 1100 perfect 8" equivalent units average per hour — day after day, year after year.
- *Proven Dependability*—precision engineering and heavy duty construction assures long, trouble-free economical service.
- *Positive Height and Density Control*—assures quality blocks under all conditions.
- *Automatic Front Pallet Feeder*—uses exclusive *Harmonic Drive* to provide smooth block handling at *high machine speeds.*
- *High-Speed Off-Bearing Hoist*—provides easy, effortless block handling; minimizes operator fatigue.
- *Torque Arm Reducer Drive*—provides smooth, strain-free power drive; reduces wear and maintenance costs.

These features, and more, are included in every Bergen TRI-MATIC high-production Block Machine. They can also be applied to your existing equipment.

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Bergen manufactures a complete line of Block Plant Equipment—Batch Mixers, Skip Hoists, Off-bearing Hoists, Height and Density Control Panels, Mold Repair Tables, and a full line of mold attachments and replacement parts.

News

New $5 Million Plant Opened by Miss Valley PC

The $5 million Mississippi Valley Portland Cement Co. plant at Redwood, Miss., was formally opened May 5 with several hundred business and civic leaders in attendance. Also attending were some 500 stockholders having their first annual meeting.

Preceding the open house, the meeting re-elected the company's present officers, including Pres. R. W. Hyde Jr. Henry V. Allen Jr., general manager and executive vice president, was the only new addition to the board.

Pres. Hyde, in a report to stockholders, said that, "the plant, designed to produce 2,000 bbls. of cement a day, is now producing 1,925 bbls. per day and is expected to reach maximum production in the near future."

MVPC now employs 92 with an annual payroll of $500,000. It was announced that plans are being made to double the size of the plant.

Cecil Ravis is company vice president; James Fowler, secretary; James Sanders, treasurer.

The Cover

Hi-Lite block in 8 × 16" face dimensions have been laid up in stacked bond with grooved mortar joints to form the back of the fountain. The panel is surrounded by a wall of 4 × 16" split block, in this attractive example of the new uses for block.

The fountain pictured can go either inside or outside.

Both pool and planter are constructed of split block, with the pool inside first covered with mortar and then coated with a well-cured, portland cement base paint. Photo courtesy of PCA.

Montana RMCA Elects Randolph Pres.

New directors and officers are: back row, l to r, A. C. Bromgard, director; Robert Pappin, vice president; Floyd McElroy, director.

Front, l to r, Vern McCullough, associate director; Harold Morgenstern, director; Marie Merrill, secretary-treasurer; Homer Randolph, president; Byron Tressler and V. J. Schultz, directors.

Homer Randolph was elected president of the Montana RMCA at a meeting held March 12-14 in Helena. Some 100 persons attended the meeting at the Hotel Placer.

The meeting theme was "Know Your Manufacturers and Dealers" and was adopted primarily to emphasize the vital part equipment people play in the successful operation of the concrete industry.

Speakers included J. R. Florey of Master Builders Co., Denver; W. J. Wagner, agricultural engineer for PCA, Jack Y. Barnes, district engineer for PCA, Floyd Swenson, another PCA district manager, and Robert Pappin and Ed Wilson of Floyd Pappin & Son company.

An unusual feature is that a transcript of the entire meeting, word for word, was bound and mailed to members and others interested. The book, about 8½ x 14", ran some 138 pages.

Gen'l. Portland, Consolidated Cement Vote To Merge

A merger of General Portland Cement Co. and Consolidated Cement Corp., merging Consolidated into General, was approved by stockholders of both companies at a meeting on April 28-29.

The announcement was made by Smith W. Storey, board chairman and president of both companies. Over 84% of outstanding stock of both firms was voted in favor of the merger, which became effective April 30.

Directors of each company were re-elected. Directors of both will become board members of the combined company. Both General and Consolidated have headquarters in Chicago.

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Steel + Design = Results

Steel — Amount of Steel (weight and quality)

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The Proven Answer to All Masonry Wall Reinforcing Problems

New Companion Product for Masonry Walls

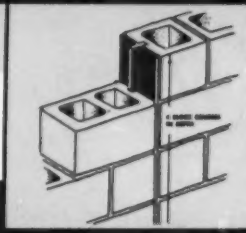
Shipped in cartons with 12 pcs 32" long, 32 lineal ft. Shipping weight 40 pounds.

Rapid CONTROL Joint

trademark

PAT. PENDING

WIDE FLANGE



Neoprene compound flanges with concave edges allow easy compression and tight control joints.

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Carmine Renola Elected NECMA President

Carmine Renola has been elected president of NECMA, at the group's 72nd meeting, held in early May at Cambridge, Mass. Renola is with Anthony Corrado, Inc., Providence, R. I. He succeeds Edgar Ducharme.

New vice president is Al Barrows, of Milford (Conn.) Concrete Products Co. The main speaker at the meeting was Dr. Walter Voss, retired from the MIT Building Department.

The group photo attendees, from left to right, are (seated) Dante Donati, Mr. & Mrs. Arnold Caputo, Herb Daunheimer, Jack Pezza, Joe Mazza.

Standing are Arnold Perreton, Edgar Ducharme, Bob Lloyd, VP Al Barrows, John Celona, Dr. Voss, Louis Freedman, Pres. Renola, Allen Freedman, Dick Whittey, Executive Sec'ty. Walter Burse, Jack Freedman, Bill Tobin, Rocco Genovese, Albert Bunyan, T. Rappoli, Art Stone, Tom Crane and Victor Kjellman.

NCMA Changes Meeting Date to Feb. 22-24

NCMA has changed the dates of its 40th annual convention to Feb. 22-24, at the Hotel Statler in Los Angeles. The change has been made to avoid conflict with other meetings of National Sand and Gravel and of NRMCA.

An optional 15 day post-convention trip to Hawaii is scheduled.

Calaveras Quarter Net Profit Up $300,000

Net profit for the first quarter of 1959 rose to $317,980, or 71c per share according to a report given stockholders of Calaveras Cement Co., San Francisco, Calif. These figures compare to a net profit of $5,087 or 1c per share for the same period in 1958.

The directors elected Grant W. Metzger vice president-production. He is succeeded as plant manager by Orrin Weeks. They also declared a quarterly dividend of 25c, payable May 20.

Ohio Ready Mix Meets June 24-25 in Cincinnati

The annual meeting of the Ohio Ready Mixed Concrete Association will be held June 24-25 at the Netherland Hilton Hotel in Cincinnati.

V. P. Ahearn, NRMCA executive secretary, and Pres. F. E. Schouweiler of NRMCA will be two of the speakers on the program.

R. Horner Named President of Kosmos PC Co.

Robert B. Horner has been named president of Kosmos Portland Cement Co., succeeding his father, Charles Horner, who has been named vice-chairman of the board. Robert Horner has been vice-president of operations for the Louisville, Ky., company, a Flintkote subsidiary.

Nat'l Gypsum Exchanges $67 Million in Stock For Huron

National Gypsum Co. has exchanged more than a million stock shares, valued at some $67 million, to acquire the Huron Portland Cement Co.

National chairman, Melvin H. Baker, described the acquisition as "an investment in the construction industry's bright future and the favorable prospects for a growing, building America."

Chairman Baker, of the Buffalo, N. Y. company, further said, "The acquisition of Huron . . . adds about $35 million to our 1959 sales potential, thus boosting our estimated total sales volume to a record shattering $215 million."

Under terms of the stock exchange agreement, National offered 1,014,300 shares of common stock for the 1,499,000 outstanding shares of Huron stock.

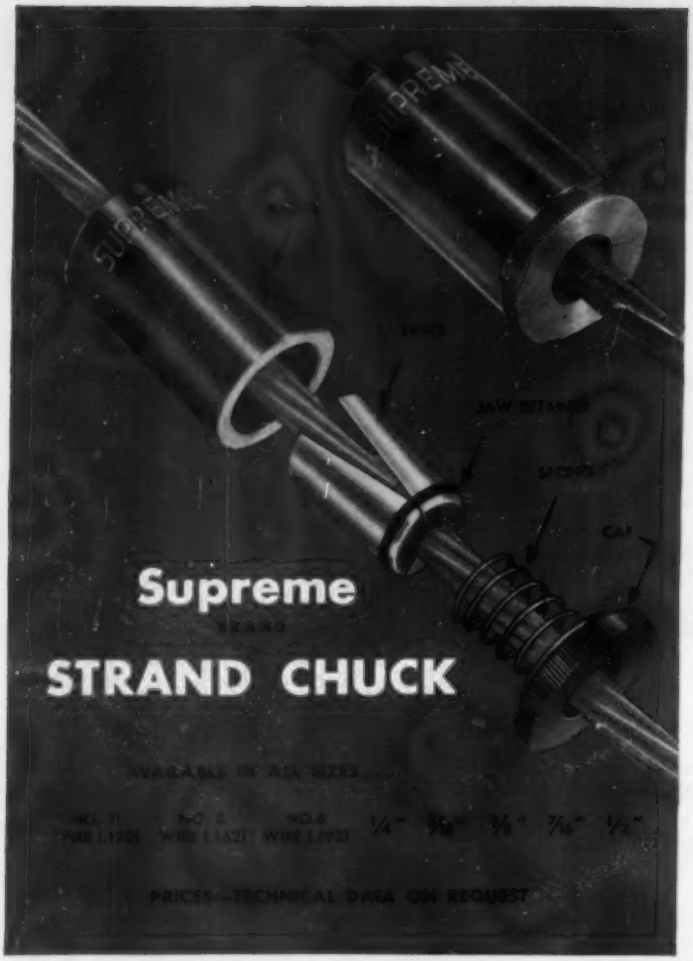
Huron will continue its sales force, production units, accounting and research facilities and will operate under the Huron name. Paul H. Townsend continues as president of the Detroit firm.

Townsend announced some new promotions, with H. Ripley Shemm promoted to the new position of executive vice president. Charles M. Adams, Townsend said, is now vice president in charge of operations. Earl Denby has been named Huron secretary-treasurer. Claude Laude continues as vice president of sales.

Townsend, in addition to acting as president, will also be board chairman.

Eight big reasons for switching to

Supreme BRAND Strand Chucks



Prestressers from coast to coast are switching to the use of Supreme Brand Strand Chucks. Supreme offers eight advantages that save time and money on every job. If you haven't yet tested Supreme—do so at once. Call or write today.

1. Fastest on—easiest off. Saves labor costs by speeding work.

2. Eliminates need for wax papers and hot paraffin dips.

3. Tool steel jaws give up to five times more service.

4. Disassembly after each use is not required.

5. Barrels guaranteed against splitting.

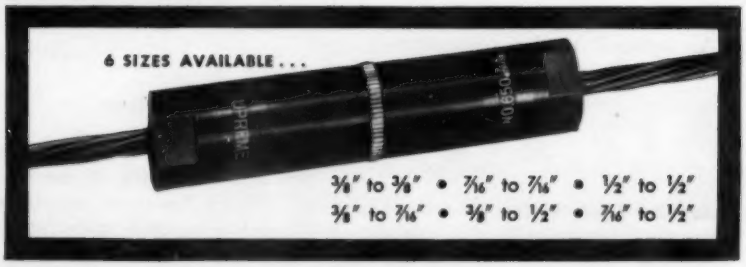
6. Strand size is stamped onto each jaw to prevent confusion and errors in assembling chucks.

7. One waxing lasts several uses. To rewax simply dip in unheated liquid Chuck Release Solution. Complete cleaning and waxing takes less than a minute.

8. Tested and approved by leading strand manufacturers. Will not cause premature strand failure.

STRAND-SAVER...
Supreme SPLICE CHUCK

Successfully joins strand to strand. No need to waste valuable strand. Used at dead end of bed to save strand remnants. Leave remnant in place and connect to new strand with a Supreme Splice Chuck.



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News

Hinds Named Master Builders Vice President-Marketing

Hinds

Frank R. Hinds has been elected vice president-marketing for the Master Builders Co. of Cleveland, according to an announcement by Stephen W. Benedict, president.

Hinds, with the firm since 1932, was elected sales vice president for the US in 1957 and held that position until the new appointment.

Prestress Design Course at University of Calif.

A short course in Design of Prestressed Concrete Structures will be held at the University of California, Los Angeles, July 6-17. Fee is $150 including textbook.

Course instructor, and text author, is T. Y. Lin, professor of Civil Engineering at U of C, Berkeley, Calif.

The course will cover such material as basic principles of pre-stress, materials, methods, loss of prestress, design of beams, slabs, etc. A course requisite is a BS in civil engineering or its equivalent.

New SW Portland SM

Elmer R. Stitt has been appointed sales manager, effective April 15, for the Southwestern Portland Cement Co., according to an announcement by Ernest V. Apt, Eastern Div. manager for the company. Offices are in Fairborn, Ohio.

Ostberg New Dundee Plant Manager

Werner Ostberg has been appointed plant manager of the Dundee (Mich.) Cement Co.

Prior to joining Dundee last year, Ostberg had been plant manager of an Egyptian cement company. He earlier had been a project and field engineer, working on cement projects throughout the world, for F. L. Smidth & Co.

The Dundee Cement plant is scheduled for completion at the end of the year, with production to begin in October.

Alpha Adds Four New Salesmen

Alpha Portland Cement Co. has announced addition of four new salesmen. They are: Richard Reese, Eastern district office in Lancaster, Pa.; Fred Mullineaux, Eastern district selling in South Jersey, Delaware, Maryland, residing in Wilmington; John Woodruff, New York district office, central New York and Syracuse selling area; and Robert Holden, Eastern district for Bergen, Passaic and Hudson counties of New Jersey.

Standard Lime & Cement Opens Virginia Office

A district sales office in Arlington, Va., has been opened by Standard Lime & Cement Co., of Washington, D. C.

Shelton R. Clemmer, who has represented Standard in that area for 13 years, was appointed district sales manager. Offices are in the Arlington Trust Building, according to the announcement by Richard J. Troja, sales manager of Standard's Building Materials Div.

Calendar . . .

JUNE 14-16, 1959	Florida Concrete & Products Association — 5th Annual Convention — Key Biscayne Hotel, Miami, Florida.
JUNE 17-20, 1959	Expanded Clay & Shale Association — Annual Mid-Year Meeting — Hotel Commodore, New York, N. Y.
JUNE 18-20, 1959	New York State Concrete Masonry Association — Mid-Year Meeting — Rocky Point Inn, Inlet, New York.
JUNE 24-25, 1959	Ohio Ready Mixed Concrete Association — Annual Meeting — Netherland Hilton Hotel, Cincinnati, Ohio
JUNE 21-26, 1959	American Society For Testing Materials—62nd Annual Meeting—Chalfont-Haddon Hall, Atlantic City, New Jersey.
AUGUST 10-12, 1959	National Cinder Concrete Products Association — Conference of Lightweight Concrete Block Manufacturers — Chalfonte-Haddon Hall Hotel, Atlantic City, New Jersey.
NOVEMBER 1-7, 1959	Prestressed Concrete Institute — 5th Annual Convention — Deauville Hotel, Miami Beach, Fla.
DECEMBER 6-7, 1959	South Carolina Concrete Masonry Association — Annual Convention — Columbia Hotel, Columbia, S. C.
FEBRUARY 15-18, 1960	National Sand & Gravel Assoc. and National Ready Mixed Concrete Assoc. — Combined Biennial Show — The Coliseum and Conrad Hilton Hotel — Chicago, Ill.
FEBRUARY 22-24 1960	National Concrete Masonry Association — 40th Annual Meeting — Hotel Statler, Los Angeles, Calif.

New York CMA Meets June 18-20

The annual Mid-Year meeting of the New York State Concrete Masonry Assoc. will be at Rocky Point Inn, at Inlet, N. Y., on June 18-20.

Huron Cement Buys 5 Acres River Frontage

Purchase of almost 5 acres of land on the Detroit River has been made by Huron Portland Cement Co. of Detroit. The land, at the foot of Riopelle St., was formerly owned by the city and adjoins Huron's distributing plant. Sale price was $410,000.

Purpose of the purchase, according to Huron Pres. Paul H. Townsend is to allow for future expansion of the Riopelle plant.

New Alpha Salesman

Harvard E. Griffith has been appointed salesman for the Alpha Portland Cement Co. in the central Pennsylvania area, according to an announcement by the company.

American Cement Elects Russell President

Russell

Walter C. Russell has been elected president of American Cement Corp., Philadelphia. He succeeds D. S. MacBride who died March 9. Russell is also board vice chairman and chairman of the executive committee.

Billings of American Cement, for the quarter ended March 31, increased to $9.05 million, from $7.6 million in the same period of 1958. Net earnings for this year's quarter were $662,349 or 14c per share, compared to 1958's $358,309 or 7c.

American's board declared a quarterly dividend of 25c per share, payable July 1. The entire 21-man board of American was re-elected at the meeting.

Florida C&PA To Meet June 14-16

The 5th annual convention of the Florida Concrete & Products Assoc. will be June 14-16 at the Key Biscayne Hotel, Key Biscayne, Fla.

The Dues Committee and board will meet on June 13. Other committee meetings begin on the 14th.

Speakers will include Arthur Motley, president of Parade Publications, and a well known management consultant, unnamed as of presstime.

John Sullivan of Besser Co. Dies

John L. Sullivan, 67, retired development engineer of Besser Co., Alpena, Mich., died April 28 at the Alpena hospital. He had been a patient there since March 9.

Sullivan had been with Besser for 37 years until his retirement March 1. Sullivan was very well known throughout the industry.

PCA Publishes Report on Russian Concrete

"Concrete and Prestressed Concrete Engineering in the USSR" is the title of a new publication by PCA, a report by an American delegation of concrete specialists who visited Russia recently.

The trip was at the invitation of the Soviet Academy of Construction and Architecture with the purpose of the trip the study of research and development in these fields in Russia.

BRAB To Study House Construction

BRAB, at the request of the FHA, has undertaken a nationwide pilot survey to identify those areas of a house where scientific and technical knowledge may improve future home construction.

Occupants of approximately 2,500 homes have been asked to tell BRAB of their experience with the performance of their house during the past year.

An objective of the study is to establish statistically reliable factors for the evaluation of information obtained, and is preliminary to a proposed full scale study to be conducted at a later date.

Arkansas Cement Joins PCA

Arkansas Cement Corp., of Little Rock, has been elected a member of PCA effective March 1, according to G. Donald Kennedy, association president. Arkansas Cement is a wholly owned subsidiary of Arkansas Louisiana Gas Co.

NRMCA To Hold Short Course

The annual short course of NRMCA will be held Nov. 16-20 at the University of Maryland, according to an announcement by Stanton Walker, director of engineering.

Registration forms will be mailed about July 1, with attendance held to 100. Although there have been modifications in instruction and presentation, Walker says the subject matter of the annual course will be much the same as it has for the past 13 years.

CONCRETE PERFORMANCE REPORT

POZZOLITH Ready-Mixed concrete plays important role at new Air Force Academy in meeting wide range of requirements for all types of concrete specified

AIR FORCE

Largest single construction project in U. S. Air Force history, the Air Force Academy Complex at Colorado Springs marks a milestone in modern concrete design and construction. Nearly 95% of the $114 million allocated for "pure construction" has gone into nearly 70 major building contracts—including over 4 million square feet of enclosed floor area. Construction at the 17,900 acre Academy site included the placing of some 800,000 cubic yards of concrete for buildings, retaining walls and bridges.

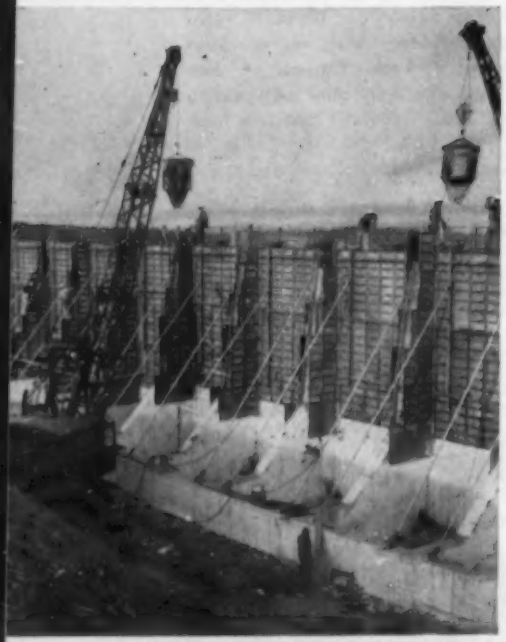
On-site concrete control lab—The Air Force Academy Construction Agency and the architects—Skidmore, Owings, and Merrill—jointly supervised all construction and established an on-site concrete materials control laboratory early in 1956. During July and August, 1956—with only a few thousand yards of concrete placed—they observed erratic and low compressive concrete strengths. The wide range and rapid changes in temperature were suspected as the cause.

Prestressed bridge girders—Construction work also included the erection of six prestressed bridges varying in length from 144 to 600 feet. There were two railway spans and four highway bridges—their girders standardized at 120 feet long in a modified T design, 71″ deep. In all, 128 girders were manufactured. Sixteen shorter girders were erected for the two railroad bridges each of which consists of two simple supported spans of 72 feet each.

Concrete for these girders contained 7½ sacks of Type I cement, 1760 lbs. coarse aggregate (¾″ top size), 1300 lbs. sand, 30.5 gallons of water and POZZOLITH Retarder.

This produced a cohesive, workable mix of about 2″ slump and 4% entrained air. The POZZOLITH Retarder provided an initial retardation which permitted proper consolidation of the mix, yet accelerated early strength. Specifications called for a compressive strength of 4,500 psi before application of stress. This strength was achieved in three to five days, air cured. Stress was applied at that time. Concrete attained a compressive strength of approximately 6,500 psi in 7 days and well over 7,000 psi in 28 days.

Concreting bridge decks—Initial retardation was required in the concrete bridge decks to provide an initial delay in hardening so that the complete deck for each span could be completely



CONCRETE RETAINING WALLS reach 36 feet high over much of the 10,000 foot wall length. Tallest pours were made by giant overhead crane. Walls required approximately 24,000 cubic yards of POZZOLITH concrete—a placeable mix of 2″ to 4″ slump with design strength of 3,000 psi. Contractor: T. F. Scholes, Inc., Reading, Pennsylvania. Concrete Contractor: Long Construction Co., Denver.

Evaluation tests of concrete materials—In August, they engaged Commercial Testing Laboratories, Denver, to make comprehensive tests. Their tests clearly established that POZZOLITH would provide uniform, high strength throughout the wide range of temperature changes experienced between early morning concreting at about 50°F and mid-day concreting at 75° to 80°F. In September 1956, POZZOLITH was first employed in concrete at the Academy. Its successful performance here led the engineers to investigate the use of POZZOLITH for control of other classes of concrete—including lightweight aggregate concrete, prestressed concrete and structural concrete. *As a result of this investigation,* POZZOLITH *and only* POZZOLITH *was used as the water-reducing, set-controlling admixture for the project.*

2-mile retaining wall—Concurrent with concreting of foundation caissons, work began on 10,000 feet of concrete retaining wall that reached a height of 36 feet over much of its length.

Design strength of the concrete required here was 3,000 psi at 28 days. With 1½″ top size aggregate, 5 bags of cement, 36 gallons of water and POZZOLITH—a placeable mix of 2″ to 4″ slump was obtained that readily exceeded the 3,000 psi specification. Tremie trunks were used to limit the

AERIAL VIEW of nearly completed Air Force Academy. Construction under supervision of the Air Force Academy Construction Agency. Architects: Skidmore, Owings & Merrill, Chicago • Contractors include: Jack Adams & Haake Construction Co., Santa Fe, New Mexico • B. H. Baker Co., Inc., Colorado Springs • J. W. Bateson Co., Inc., Dallas • T. C. Bateson Construction Co., Dallas • A. H. Beck Foundation Co., San Antonio • Colorado Constructors, Inc., Denver • Dondlinger & Sons Construction Co., Inc., Wichita • E. & M. Construction Co., Denver • Elgas Construction Co., Colorado Springs • Farnsworth & Chambers Co., Inc., Houston • A. S. Horner Construction Co., Denver • Peter Kiewit & Sons' Co., Denver • Wade Lahar Construction Co., Tulsa & Denver • Long Construction Co., Denver • Matelich & Hanson, Inc., Englewood, Colorado • Robert E. McKee, Inc., Santa Fe, New Mexico • Mountain States Construction Co., Denver • Nowers Construction Co., Pueblo, Colorado • Frederick Raff Co., Colorado Springs • Ramsey-Leftwich, Lubbock • Saxet Foundation Co., San Antonio • T. F. Scholes, Inc., Reading, Pa. • Del E. Webb & Rubenstein Construction Companies, Phoenix • J. F. White Engineering Co., Englewood, Colorado • POZZOLITH Ready-Mixed Concrete: Concrete Materials, Inc., Kansas City • General Concrete Co., Colorado Springs • Transit Mix Concrete Co., Colorado Springs.

economically, for the broad range of job requirements and varied climatic conditions encountered at the site.

The Master Builders field men and the Company engineering staff worked closely with project engineers, the field control laboratory, contractors, and concrete suppliers to achieve the common goal of uniform, superior quality concrete at lowest cost-in-place.

For *your* job . . . with *your* materials POZZOLITH concrete is best. Neither plain concrete nor concrete with any other admixture can match the results you obtain with today's POZZOLITH.

On any current or future concrete projects, the local Master Builders field man will welcome discussing your requirements. Call him in. He's at your service—and expertly assisted by the Master Builders research and engineering staff—unexcelled in the field of concrete technology. Write us for complete information.

ACADEMY

poured before initial set occurred. This permitted full dead load deflection and achieved true composite action between girders and the concrete deck. Because the contractor wanted to use the completed decks as work areas in placing girders for the remaining spans, it was important that these slabs be placed into service at an early date. POZZOLITH Retarder provided the required, controlled initial delay in hardening and produced early strengths equal or better to what could be expected with a comparable plain concrete mix. At placing temperatures below 50°F, no extended delay in hardening occurred.

Lightweight concrete—Design of many of the buildings included lightweight aggregate concrete floors for the second, third and fourth stories—and concrete roofs. Preliminary mix designs indicated that with local lightweight coarse aggregates, natural sand for most of the fine aggregate and POZZOLITH—the 3,000 psi compressive strength specification could be met with 5 sacks of cement and air content maintained at 9% ± 1½%. This lightweight concrete had excellent workability and weighed approximately 105 lbs. per cubic foot, well below the 110 lb. maximum specified.

POZZOLITH and Master Builders field service—POZZOLITH was an important aid in meeting and exceeding specification requirements in over 750,000 of the 800,000 cubic yards of concrete at the Air Force Academy. For each of the many classes and types of concrete specified—it provided the required batch-to-batch uniformity, most

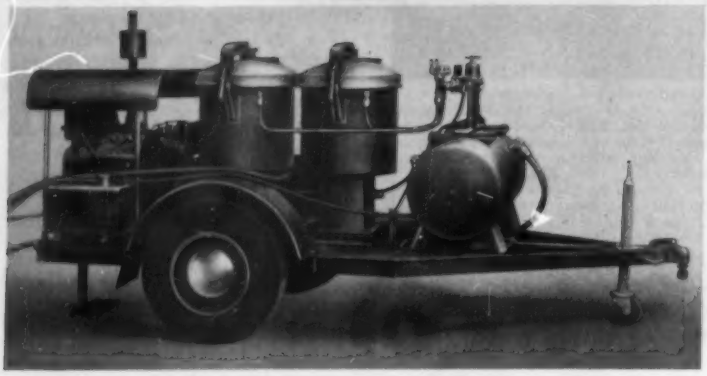
PRESTRESSED CONCRETE BRIDGE GIRDERS attained 28-day compressive strength of over 7,000 psi. Construction of all 144 POZZOLITH girders was by A. S. Horner Construction Co., Contractors, Denver. Consulting Engineer: L. Boduroff, Denver. Prestressing: Prescon Corp., Corpus Christi, Texas.

The Master Builders Company, Cleveland 3, Ohio • Division of American-Marietta Company
The Master Builders Company, Ltd., Toronto 9, Ontario • International Sales Department, New York 17, New York • Branch Offices in all principal cities.

MASTER BUILDERS®
POZZOLITH*

•POZZOLITH is a registered trademark of The Master Builders Co. for its concrete admixture to reduce water and control entrainment of air and rate of hardening.

M-P



MULTI-PURPOSE
Masonry Spraying Machine

Amazing versatility fits the new MP machine to many functions concerned with the treatment of large masonry surfaces.

Washing, chiseling, sand-blasting, base-coating and Colorcreting are among the many operations performed by the MP under controlled air pressure.

Base coat and stucco are applied at heights or distances up to ninety feet from machine, with material — water, stucco, sand or Colorcrete — pumped by pneumatic pressure direct from mixing tanks to discharge nozzle. Base coat or stucco can be applied at the rate of 400 to 600 square feet per hour.

Outfit comprises dual mixing tanks, air compressor and blower, gasoline engine and automatic starting battery. All mounted on a steel-decked trailer to form a self-contained, mobile unit, complete with air and material hose and application gun. Additional information on request.

COLORCRETE INDUSTRIES, INC.
569 OTTAWA AVENUE • HOLLAND, MICHIGAN

WASHING

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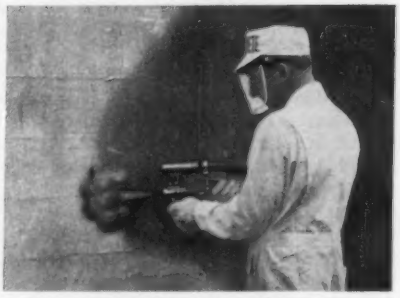
SAND BLASTING



BASE COATING

COLORCRETING

For more information use postcard facing page 48.

Editorial

Meet Our New Editor, Jack Anderson

It's not very often that I use this page to write a letter to our readers and advertisers, a letter on *Concrete's* activities rather than on the problems and progress of our industry.

But from time to time things that we think would interest you happen in our office. These are things that will affect both reader and advertiser in the months to come.

The first thing, and an important one, is that we now have a new editor in Jack Anderson. Jack most recently was managing editor of Brick & Clay Record magazine.

Some of his aims for *Concrete*, and for you, include a faster reading magazine with livelier appearance; feature stories and news that give fuller, more pinpointed and useful coverage of the industry and its people. In short, a better magazine for both reader and advertiser.

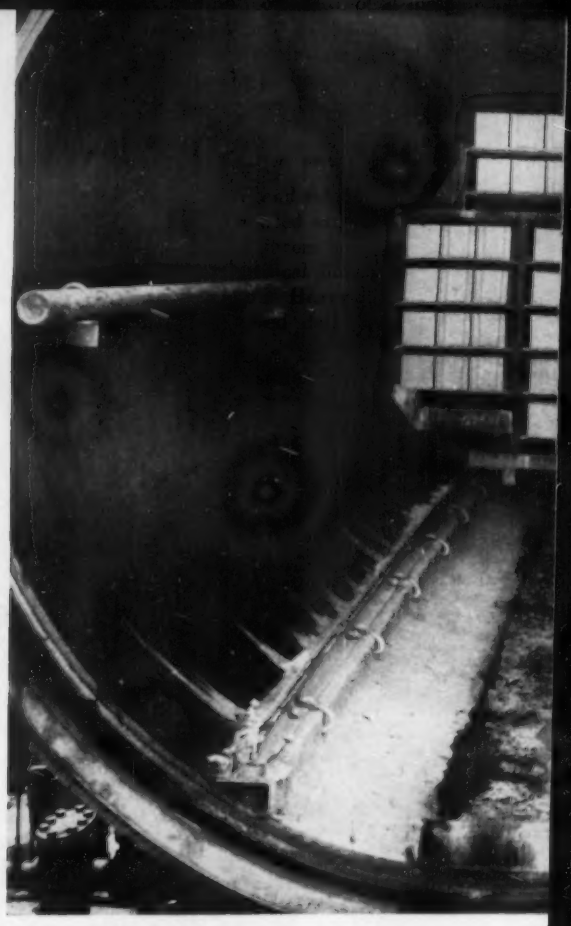
We'll be doing a lot of things that are corollary, with some signs already noticeable in this issue. A chronic headache for almost every magazine is getting to press on time. We're tightening up our schedule beginning, in part, with this issue. Beginning with the August issue, our new advertising deadline (including classified advertising) will be the 4th day of the month preceding the month the issue is dated.

This will result in your getting your copies much earlier each month.

We're frankly happy about the new excitement and activity here at *Concrete*. We hope it'll do good things for our readers and advertisers. Our best magazine is the one that does you the most good. So, if you like (or dislike) what you see in the magazine, drop us a note. This'll help keep us on the right track.

We fully realize it's much easier to say these things than to prove them by doing them. We intend not just to say we'll have a better looking, more readable magazine . . . but to prove it in the next few issues.

Don Papineau



New addition of autclaving units results in operation savings, tax savings, and adds up to —

Better Sales of a Better Product

With the recently completed installation of two 120′ autoclaves, Florida's Hartstone Concrete Products Inc. is finding ready acceptance for the first autoclave block marketed in that state.

Pres. William E. Scott, of the Tampa firm, says, "Many public buildings in this area are being built of clay brick. Aside from lumber, it's clay brick that has been a thorn in our side and our most virulent competitor."

"If we can move clay brick out, we've enlarged our own market and the market of the concrete industry as a whole."

"Our autoclaved block has earned acceptance by architects, general contractors and specifying authorities," Scott says. "Since autoclaving produces a color stable block, and a coating of silicone will obviate outside wall painting, our block will meet and exceed building specifications. There is thus no reason why such block cannot be competitive with clay brick and open new markets to the concrete maker."

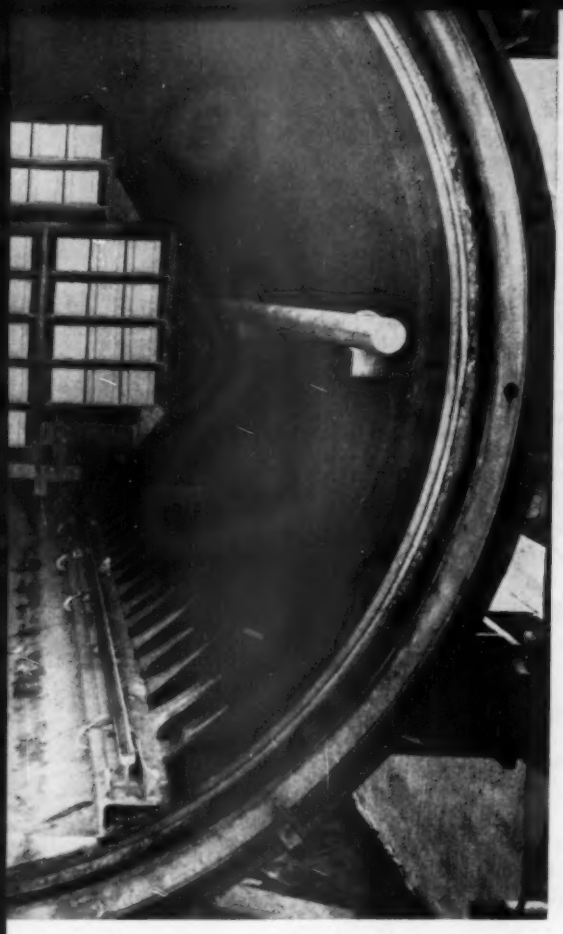
Scott points out that the autoclaved block has a lighter appearance, sort of between a dark cement gray and a light gray, preferred by builders because of its more pleasing appearance.

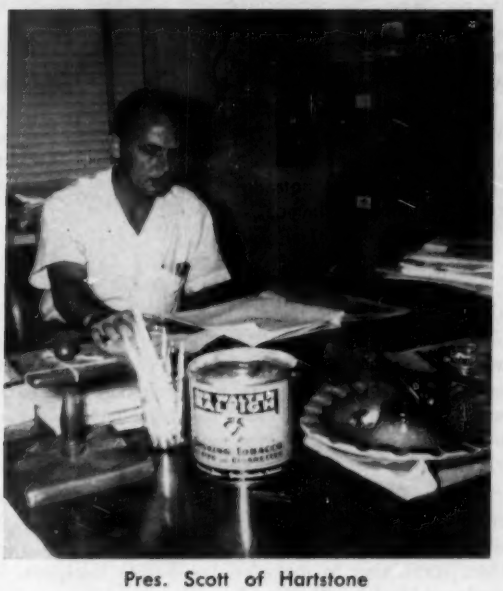
Other area plants, producing block by conventional methods of 28-day curing or steaming periods at intermediate and low pressures, are finding themselves at a disadvantage in competing with autoclaved block.

For example, some plants are established in restricted areas where further expansion is impractical for various reasons. This puts a lid on optimum expansion and thereby demands accumulation of a vast inventory.

Need Less Inventory

In Hartstone's case, the plant covers three city blocks in a highly industrialized area. Prior to use of the autoclaves, even in times of full production, when a customer was impatient it was sometimes necessary for Scott to buy block from other yards.





Pres. Scott of Hartstone

At Florida's Hartstone

In addition, "We were being taxed $4,500 a year on our inventory of concrete products", says Scott. "Since a lesser inventory is required through autoclaving, this tax will drop to about $3,000."

"We couldn't make enough block to supply the demand," Scott says. "Now we have aggregates and cement one day, and 14,400 regular 8x8x16 units all ready to go the next day. We get by with a stockpile of 30,000 regular block; autoclaving cuts 50% of our special stock inventory."

Not that the price is any lower to contractors than conventionally produced block, but because they're assured a block that has been test-proven to be far better cured than conventional block and of highest quality, autoclave masonry units are preferred.

Scott is selling his trade via open house invitation to inspect the installation, by direct mail, and by making comparisons of his block with conventional block.

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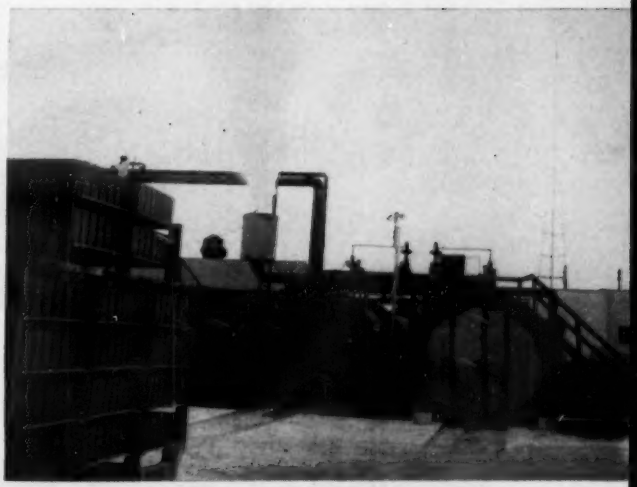


Autoclave method was tested in pilot operation

Hartstone: Better Sales With Autoclaving

Continued From Previous Page

He points out that he can make delivery of a thoroughly cured block in 24 hours, against the 28 day delivery of other plants.

A comparison, made by Scott and properly appreciated by builders familiar with Florida's humid weather, is that in this area block making is plagued with so much moisture that block may have considerable difficulty attaining ASTM and Federal specifications for dryness. Autoclaving eliminates this problem.

Consistent Strength

Other merchandising arguments which sit well with building contractors is Scott's contention that "whereas autoclave block are consistently strong, conventional block may be of varying strengths and shrinkage due to incomplete curing. Also, the autoclaved product resists sulfates while conventional block may not withstand use in such locations."

"Finally," Scott says, "Hartstone has discontinued conventional block making for the purpose of giving the builder a quality item that will stand up", with all these factors combining to make an irresistible salespitch for autoclaved block in this West Coast area.

Cured in 150 lbs. of live steam at a temperature of 3,600°F, the autoclaves are responsible for many operating economies. This has crystallized Hartstone's decision to make a complete changeover from previous methods and to autoclave all of their diversified line.

Autoclave Savings

"Our investment is justified by the fact that it's no longer necessary for us to carry an extensive inventory," Scott feels. "We're getting a much higher yield. On conventional block making, we got 28 block to the sack of cement. Now we get 35 and they're all grade A."

Futhermore, he adds, "On conventional block if the cement quantity was too low, or the yield too high, after low pressure curing we invariably had considerable loss through breakage."

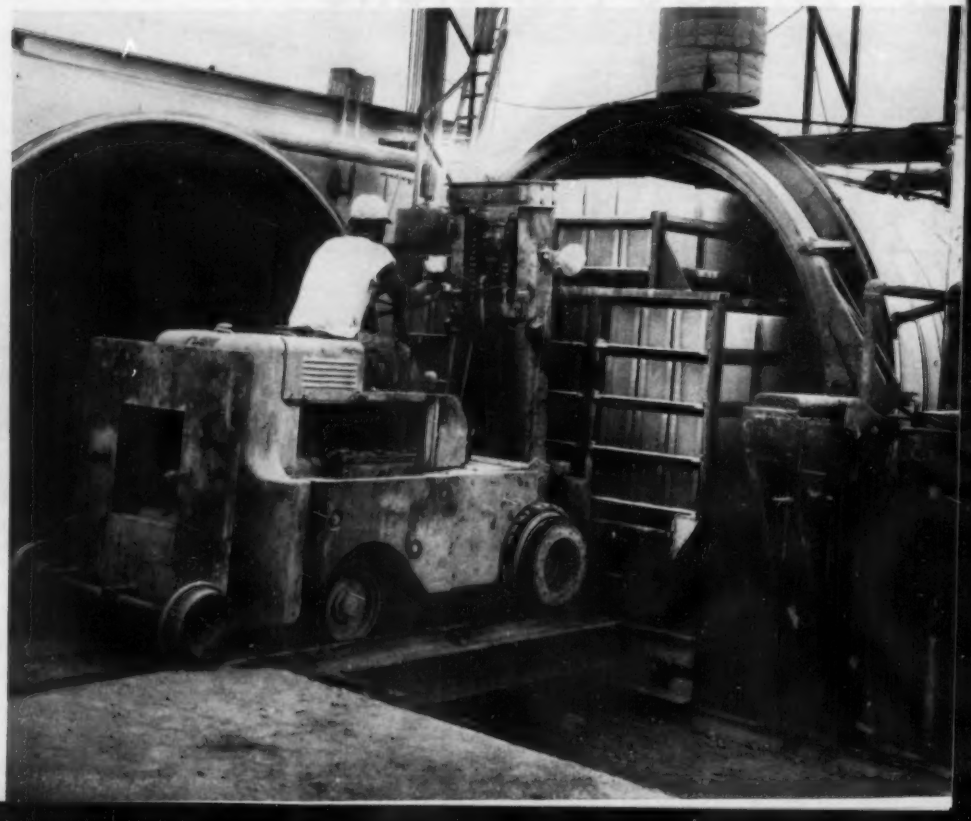
Scott further cuts down on operational expense by envisioning a change in the method of charging and unloading the lengthy autoclaves.

Cut Loading Time

Presently racks are moved in and out of the autoclaves by forklift, taking now some 60 minutes to unload the forklifts with their capacity of 102 block per rack.

By a car puller that will draw an entire train of 3,600 block into the autoclaves, using a cable system, unloading time will be cut to about 10 minutes.

In addition to the unloading time saving, there'll be significant saving of heat since immediately after blow-



Forks will be replaced by car pullers. Then 3,500 block will be moved at a time.

down removal of cured block and insertion of another load can be quickly accomplished, and another curing cycle started.

Machine Cycle

One bottleneck in the Hartstone operation is the pair of block machines used. These are running on two 8 hour cycles to produce the 14,400 block per day.

If needed, Scott can increase production by operating the autoclaves on three 8 hour cycles and adding four hours of production time to each block machine.

Should further extension of the company's experiments with the 8 hour cycle prove its feasibility, such a move will mean a 50% production boost.

In Scott's experience, the Florida aggregates don't hasten any corrosion action against autoclave racks.

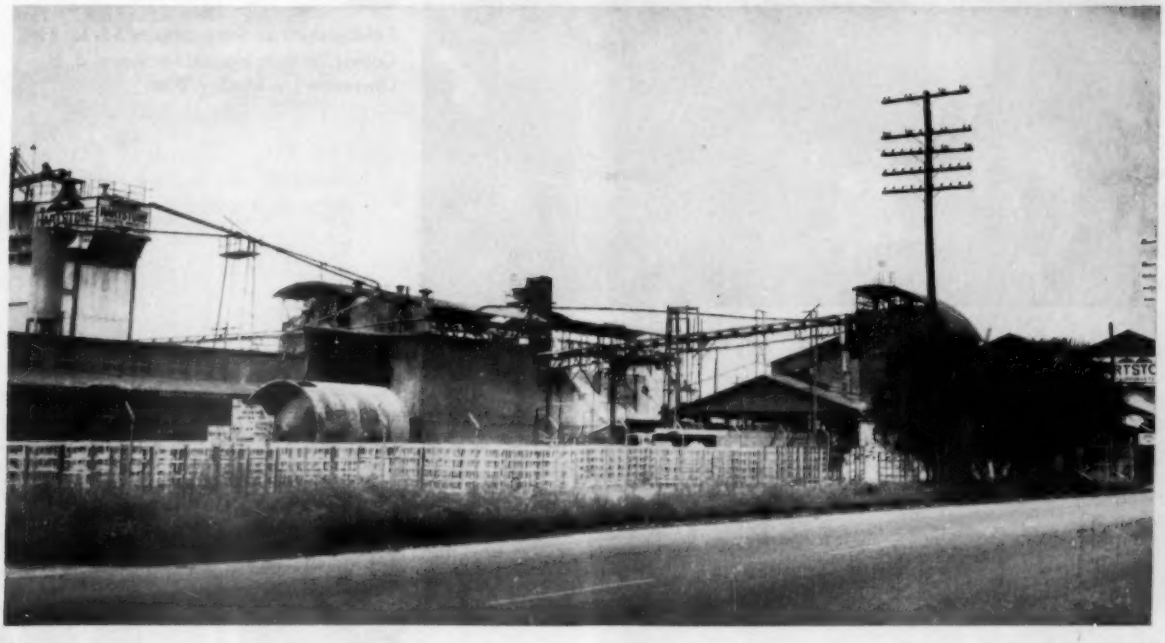
"We're using test patches of bitumastic, special paint, and a cement coating," says Macolm McBryde, Hartstone's engineer. "The bitumastic paint patch has had a ten time exposure and shows no sign of disintegration. Tests to date indicate the cement coating to be the most durable and cheapest anti-corrosion technique."

For the better part of a year prior to the autoclave installation, Scott experimented with a small pilot autoclave.

"It cost us $500," Scott says, "but it proved the feasibility of autoclaving for us. It helped to determine the correct cycle for our operations. It indicated we could get a grade A block."

Testing assures that block meet ASTM specs.

An overall view of the Hartstone operation in Tampa, Fla.



L. Ed Lee, new TAA president

John Van Amburgh (left), retiring TAA president talks with Ray Cain (standing) executive secretary for TAA and TRMCA; Dan Parker, retiring TRMCA president.

Safety awards were presented to Burt Collins, at left, Harold Lacy and E. H. Lawrence by Shelley Burt.

Exec. Secty. Cain talks with Rai B. Kelso, newly elected TRMCA president.

Lee, Kelso Elected Presidents at Joint TAA, TRMCA Meeting

Human Relations, roads, Texas business and prestressed covered at Houston convention.

Human relations and communications, prestressed concrete, and a discussion of the Texas highway program were high spots of a joint meeting, the Fifth Annual Convention, of the Texas Ready Mixed Concrete Association and the Texas Aggregates Association.

The meeting was held from April 23-25 at the Shamrock Hilton, in Houston.

Lee, Kelso Elected

L. Ed Lee was elected president of the Texas Aggregates group, with Robert G. Pyle elected vice president and R. E. James Jr., secretary-treasurer.

The new TAA board of directors includes Dr. Harold H. Moursund, Hugh McMillian, L. P. Givin, George H. Smith, John H. Langston, and John H. Van Amburgh. Van Amburgh is the outgoing president.

The TRMCA elected Rai B. Kelso president, Bill B. DeMent vice president, Clyde McMahon second vice president.

Directors of this association are Dr. Stanley Crow, Wesley W. McKemie, H. Q. Haile, Jr., Dan R. Parker, H. M. Bodine and Edwin D. Neeley.

Highway Program

A major speaker at the three day meeting was DeWitt Greer, Texas State Highway Engineer, who described the bounding state program.

He said, "The Texas Highway department is spending $142 million a year for road materials. This is almost three times the $49 million that was being spent for aggregates—road materials—five years ago."

Continuing, Greer said, "We have added 4,200 miles to our state highway system in the past five years." He added that, if the department's financial picture brightens and it's able to put $350 million of road work under contract in the next 12 months, the department will be spending $190 million for aggregate and concrete.

Other Speakers

Other speakers at the program included W. B. Mansfield, of Texas A&M's engineering extension service, with a talk on "Human Relations and Communications." H. C. Pfannkuche discussed "Prestressed Concrete—Tilt Up Construction."

Another speaker, Joseph Gray, engineering director of Nat'l. Crushed Stone Assn., told about "Aggregates in High Type Asphalt Paving." Law problems were discussed by Texas District Judge Bert Tunks; the Texas business outlook by Dr. James Byrd of Houston's National Bank of Commerce.

R. G. Pyle, TAA vice president

R. E. James, TAA secty-treas.

Clyde McMahon, TRMCA 2nd VP

Automated Equipment Means:

Two Men Do Work of Eight At North Hollywood Concrete Plant

"In the face of ever increasing labor and material costs, it has become a necessity for concrete block plant operators to turn to the economy of production afforded by automation," declared Ray Clanton of the Clanton Corporation of Pacoima, Calif.

The North Hollywood Concrete Tile Co. has been fully automated with Clanton machinery, with two men doing the productive work formerly requiring eight men. The North Hollywood firm is an exclusive producer of 12" high design-faced architectural units.

Its concrete blocks have been utilized in such well-known buildings as the Disneyland Hotel, new campus buildings of Occidental College, new campus buildings of the University of California at Santa Barbara, and the Knickerbocker Hotel in Hollywood.

"Today's competitive market in the construction field has dictated the advent of automation in production," Clanton testified. "With this basic objective as our goal, we have created automation machinery which will reduce labor force requirements, improve the quality and quantity of production, and also cut down to a minimum the losses due to normal handling of concrete masonry products."

The first step in this Clanton Component method for block plant automation starts right at the block machine itself. The Clantons realized that a means of increasing the cycles per minute of each block machine would greatly reduce the cost per unit for production.

The normal agitator was unable to fill the molds evenly and still allow an increase in the operating speed of the block machine. As a result of continued experimentation, they developed a stationary or fixed set of serrated steel plates or dividers identified by the name of Clanton Serrated Knives. The sawing action of these knives permits a much faster and more evenly filling of the molds and consequently, not only an increase in cycles per minute, but a better quality product.

With the advent of faster production, the next problem was that of

Aerial view of the 15 acre plant site of North Hollywood Concrete Tile Co.

being able to handle this greater product volume. The greatest problem was that of labor and time in the final cubing operation. To solve this problem, the Clanton Auto-Rack was designed and engineered to replace manual labor in rack unloading.

Automatic Unloader

The Auto-Rack provides an automatic rack unloader, cubing conveyor and pallet return for the manual cubing operation. This device can be operated either fully automatically or semi-automatically as desired. Cubing of blocks can be automatically timed to the operation speed of the block machine. The machine is designed for adaptation to any plant facility and rack handling devices.

In its operation, full racks from the curing facility are placed on a conveyor so as to always have available a full rack of blocks for the automatic rack unloader. Empty racks are carried along the conveyor which permits the forklift driver to pick them up at the same time he brings a full rack to the machine.

This phase alone reduces forklift time by almost 50 percent. Where normally four men would be required for cubing the production of a three-block machine, with the Auto-Rack, two men are able to handle this operation without any difficulty. Any size or type of block is readily handled by the Auto-Rack. The cleaning and automatic return of the empty pallets to the block machine also contributes to the reduction of labor costs.

Automatic Cubing Next

Following the development of the Auto-Rack, it was apparent that it was necessary to carry this labor saving measure one step further by eliminating the hand stacking of the final cubes of block. Thus evolved the Clanton Auto-Cube. This cubing machine is produced in either the semi-automatic or fully automatic design. While the semi-automatic unit requires one man to complete the cubing operation, the fully automatic unit is operated entirely by a central electronic control panel.

A conveyor, which may lead directly from the Auto-Rack, feeds the block to the Auto-Cube where the units are placed in proper size tiers in the final cubing of the units. Wooden pallets are automatically fed into the machine as required.

The full wooden pallets are transferred from the machine by rollers into a position to be picked up by the forklift. In areas where blocks are not cubed on wooden pallets, the first layer of block can be turned to permit removal by a six tine forklift.

The Auto-Cube may either be synchronized with the rate of cycles of the block machine or operated independently at any required speed. The fully automatic models are capable of handling the production from as many as three high-volume block machines simultaneously. The unit is designed to handle all shapes and sizes of blocks, veneer or specialty units. Again, increased production and reduced labor is attained through automation with the elimination of one or two men in the cubing operation.

Automatic Off-Bearing

Going back to the actual production point (the block machine) it was soon discovered that with the normal one man mechanical means of off-bearing, the production rate of the machine was limited by the physical capabilities of the man.

To solve this problem, the Clanton Corporation designed and developed the Auto-Loader. This automatic off-bearer and rack loader is timed to the operating speed of the machine and completely eliminates any manual handling of the blocks produced. In reverse of the Auto-Rack operation, one forklift delivers the empty racks to a conveyor and picks up a full rack for transfer to the plant curing facilities. The conveyor automatically places an empty rack in position as each rack is filled.

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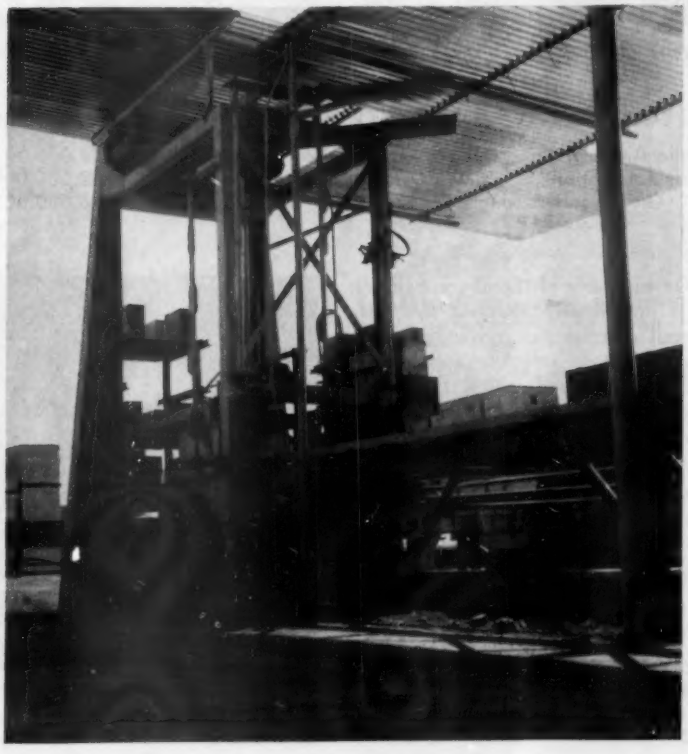


Action shot of Auto-Rack shows 12" high units being removed from racks, conveyed to cubing area.

Clanton Plant

Continued

The Auto-Loader not only eliminates one man as off-bearer, but also reduces forklift time by fifty percent. Thereby, the machine can be operated at any speed desired. By eliminating the manual action, the quality of blocks produced is also assured.

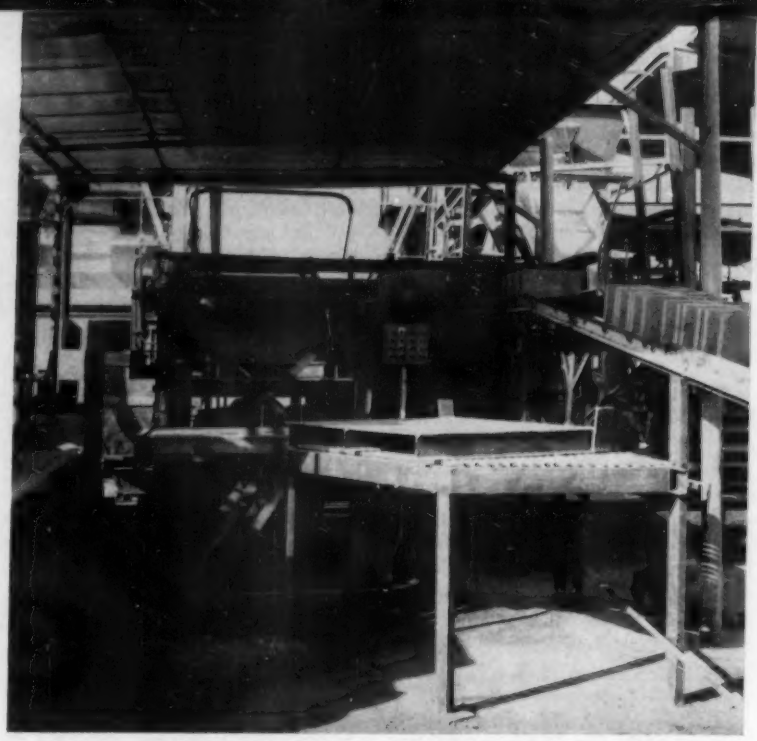
As outlined above, the Clanton Component Method of block plant automation is comprised of three separate units designed to provide fully automatic operation to each phase of concrete block production. The unique feature of this plan is its adaptation to any block plant as a whole, in any combination of two units, or installation of each unit individually as time and finances permit.

In a normal three-block machine operation, seven to eight men are required to handle the mixing, block machine operation, forklift operation and cubing. With the addition of each of these automation components, the labor force is reduced by an average of two men per unit. Upon installation of all three components of automation, it is possible for one man to handle the rack loading, unloading and cubing operation of a normal three-block machine.

The importance of the labor saving factor that the block plant owner may achieve through adaptation of automation is amply reflected in the following analysis of cost and production.

The average three-block machine operation is capable of producing 7,200 of 8 x 8 x 16 equivalents per eight hour shift. Without automation, this requires an eight man crew. Accordingly, this gives approximately 900 units of production per man. Now, as Clanton automation is applied, we find that labor and production change the proportions listed below:

WITH THE INSTALLATION OF:	NO. OF MEN REQUIRED	PRODUCTION PER MAN
A. Auto-Rack	6	1,200 units
B. Auto-Cube and Auto-Rack	4	1,800 units
C. Auto-Loader plus Auto-Cube and Auto-Rack	2	3,600 units



Clanton semi-automatic Auto-Cube is shown here.

It is significant that with complete automation, production per man is increased from 900 units of 8 x 8 x 16 equivalents to 3,600 units per eight-hour shift.

Of equal importance, is the labor cost for this production. Based on a national average of $6,000 per year for each employee, here are the applicable figures:

	NO. OF MEN REQUIRED	ANNUAL PAYROLL
Without Automation	8	$48,000.00
With Automation	2	12,000.00
Gross yearly saving		$36,000.00

On the basis of the above figures, it is immediately apparent that the overall cost for the conversion of a block plant to complete automation can be amortized within twelve to eighteen months from the date of installation.

Coupled with these most modern plant facilities are the three components of automation, i.e., Clanton "Auto-Loader", "Auto-Rack" and "Auto-Cube", which permit the handling of a daily production in excess of 30,000 units in 8 x 8 x 16 or equivalents.

From a two-man operation with a single hand operated block machine, North Hollywood Concrete Tile Company has developed into one of the largest block plants on the West Coast in a period of only fifteen

Hollis, Richard and Raymond Clanton.

years. Today, this company has a production, sales and business office force of more than sixty employees with an annual payroll of more than $325,000. During 1958, the total annual production was in excess of 8,000,000 units.

Plan New Unit

To keep pace with ever increasing demand for their products, plans are now underway for the development of a super block producing plant on a twenty-two acre site located between Saugus and Newhall.

This new plant will encompass a six-machine block producing operation, a complete pre-stressed concrete unit production plant, and a ready-mix plant to provide concrete for structures employing concrete block or pre-stressed concrete units.

Of course, automation will play a key-role in the overall operation of these new plant facilities. In addition to the three automation components now in operation at their North Hollywood plant, engineering data is being compiled for the construction of fully automatic electric monorail conveyors for the movement of blocks in and out of the curing kilns.

The Clanton Corporation has had the advantage of a pilot block plant in which to conduct their engineering, research, experimentation and final development. This has permitted them to develop their automation equipment under actual working conditions.

This pilot plant is the North Hollywood Concrete Tile Company, located in North Hollywood, California. This company was formed as a three-way partnership in 1944 by Richard Clanton and his two sons, Raymond and Hollis.

The first unit made by this firm was a 6 x 4 x 12 standard block which represented just about the whole selectivity of available sizes. In contrast, today this company is one of the largest block plants on the Pacific Coast and produces more than 650 shapes, sizes and colors of concrete masonry units.

Included among this wide variety are such exclusive products as Tru-Lite 12 and Tru-Tone 12 architectural units which offer a selection of eight basic patterns incised in the face of the unit; Meteorlite split-face units in both veneer and structural design; and the new View-Lite screen wall units available in six unique designs to cover most phases of modern architectural applications. The latest product offered by this company involves a new concept in reinforced grouted masonry units which is identified by the name of Shel-Brik.

The present plant facilities at North Hollywood Concrete Tile Company embrace two separate production areas and include the following equipment: Three 12" high fully-automatic Columbia block machines; one Besser Super Vibra-Pac machine; two complete batch plants and mixer assemblies which include a custom designed Noble four sectional, 165 ton aggregate bunker and 1,200 cubic foot cement silo; a 75 cubic foot Columbia mixer designed to accommodate full speed production of two block machines; and, a series of electronically controlled steam curing kilns designed to adequately handle the production from their four high-speed block machines.

Precast Panel,

Erection time is being cut as much as 75% on farm and commercial buildings by use of precast concrete panels, combined with newly designed concrete block. Both are used as major components of a new prefabricated modular construction system designed by William Shaffer, of Shaffer block works, Somerset, Pa.

The system, which has been patented, is also being used for retaining walls, swimming pools, and similar miscellaneous purposes.

Structural Advantages

Among the structural advantages reported by Shaffer are, aside from savings in assembly time, the appearance; fewer joints; strength superior to a concrete block wall;

◀ Last slab is channeled into place on side of garage. Windows overlap concrete on all four sides.

Block System Cut Erection Time 75%

and insulating properties equivalent to those of a 10" block wall.

Material cost is about the same as for a block building of similar dimensions. But the concrete panels reportedly can be assembled for about 10% less in cost because of savings in labor. Piers and walls of the first concrete panel building, a dairy barn, built by Shaffer's system were erected in 4½ hours, with the barn 40 x 48'.

Main feature of the system is a specially designed concrete block that can be used in corner columns, center columns or in interior partitioning columns. The block weighs 70 pounds and measures 15⅝-inches square by 7⅝-inches deep, with the usual core holes at the four corners. Slots on the sides, to receive the precast concrete panels, are 4 inches square.

Number of slots in the block depends upon where the blocks are going to be used in the building. For example, a block in a corner column will have slots in two adjacent sides. A center column block will need slots in opposite sides. A center column block that also serves to support an interior wall will need slots on three sides; while a partition supporting column in the center of the building will have openings on all four sides.

At Shaffer, the blocks are cast with adjacent two sides or opposite two sides open. The other sides are cast closed, but they have core holes that can be sawed open in case the block is used to support slabs on those other sides.

Precast Tongue-Groove Panels

The slabs are precast tongue-and-groove concrete panels measuring 2 feet by 11¼ feet, 3½ inches thick, cast of 1-2-3 mix (1 part cement, 2 parts sand and 3 parts aggregate). Each slab weighs roughly 900 pounds (about

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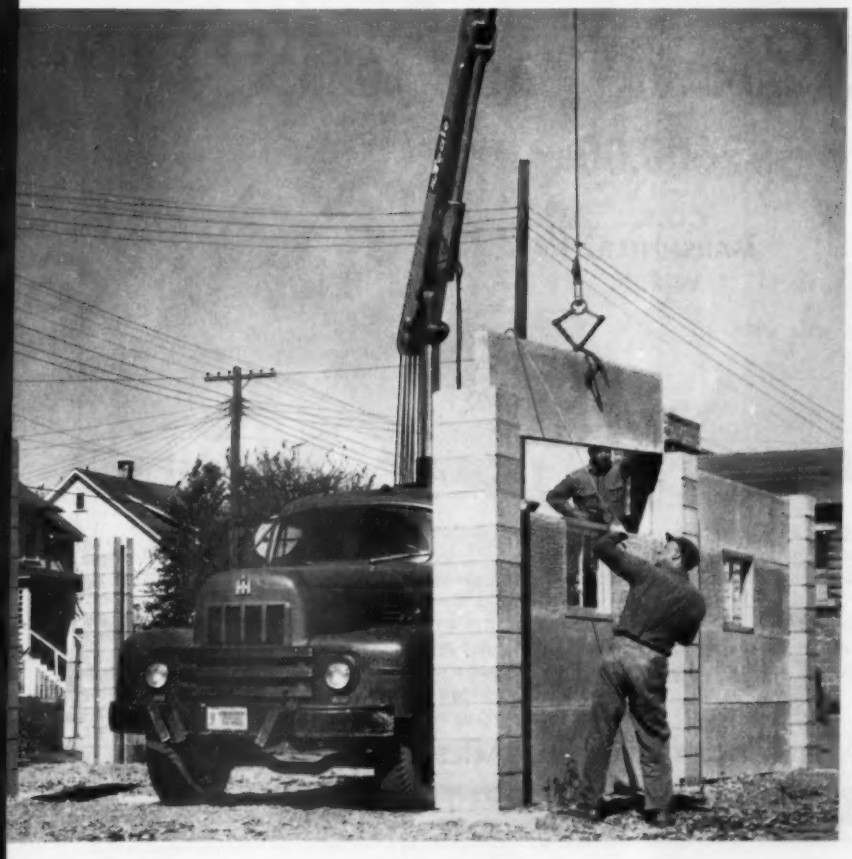


Window level slab section goes into place. Slab here is 50½" wide.

Block, Panel System Saves Erection Time . . . .

Continued

1/3 cubic yard of concrete), and is reinforced with 4 x 4" No. 4 wire 23 inches wide and 11 feet 2 inches long.

Construction of a building by this system consists simply of mounting concrete block pilasters or piers on 24-inch square footers. The columns are set on 12-foot centers, with slots in the blocks forming a channel into which the precast concrete panels can be inserted to form the sides of the building. Footers have to be large enough to support the piers and at the same time furnish bearing surface for the slabs.

After the columns are set, the slabs or panels are lowered into the slots and can be built up to a height of 20 feet. A ribbon of calking compound between the tongue and grooved edges of the panels seals the joint.

Dampness Cut Down

Concrete panel construction reduces required joints so that interior dampness is practically eliminated. In an 8 by 12-foot section, only three horizontal joints are needed. Using concrete block construction for the same section, 11 horizontal joints and 9 vertical joints would be required.

This type of construction requires no lintels over the doorways or windows, and no footers except at the piers. Shaffer has developed a 24-inch by 34-inch extruded aluminum window which can be installed singly or in pairs at the same time the walls go up. Special 50½-inch long panels fill the horizontal space between the windows.

System Uses Special Forms and Precaster

Steel forms specially designed and fabricated by Blaw-Knox Company, Pittsburgh, are used exclusively in casting the slabs. These rigid steel forms hold the product square, straight and meet the critical dimensional tolerances required in this kind of work. Heavy-duty construction permits the form to be used daily, withstanding vibration and frequent handling.

Manufacture of the slabs at Shaffer involves use of a standard 12-foot Besser precaster. The form is half filled with concrete, and the 4 x 4-inch No. 4 reinforcing wire is laid on the concrete, and the remainder of the concrete is added. Next the concrete is vibrated, smoothed, and the form and its still-wet slab are carried by lift truck to the drying area.

Slabs air-cure in about 24 hours. During the winter months they are steam-cured, also in 24 hours.

At present, Shaffer is using 50 Blaw-Knox forms.

TRMCA Inaugurates Its First Short Course At Texas A&M

These men attended the short course. TRMCA Pres. Dan Parker is at the center, seated, in the dark suit.

Earl Johnston takes test as part of communications section. Watching is TRMCA Pres. Parker.

Ready mixed concrete producers, their salesmen and supervisors completed what they considered a highly successful first Texas Ready Mixed Concrete Association Short Course at Texas A & M College in the month of April.

Sponsored by the Engineering Extension Service, Texas A & M College, in cooperation with the Texas Ready Mixed Concrete Association, the three day short course included discussions on the subjects of sales promotion and advertising, basic factors affecting quality control of concrete, admixtures, communications and public relations, safety, and a practical demonstration breaking concrete cylinders.

The Texas Transportation Institute, representatives of the ready mixed concrete, cement and chemical industries assisted the Engineering Extension Service in presenting the program.

At the recent statewide meeting in Houston, the membership of the TRMCA voted to make the Short Course an annual affair.

Among the speakers were Alan W. Langford of Master Builders Co., who showed a movie "The Man With The Trowel"; G. B. Southworth, ass't. sales manager of Master Builders, who spoke on "Sales Promotion"; Ray A. Lewis, PCA public relations representative, talking of "The Function of Advertising"; H. Q. Haile Jr. of Capitol Aggregates Inc.

IT HAPPENS EVERY DAY Latest Rulings in Labor Relations

CAN YOU DISCIPLINE AN EMPLOYEE FOR PARKING ON A CITY STREET ?

Here's How To Settle Grievances

A management consultant offers tips on setting up procedures to handle these problems

By

Robley D. Stevens

Management Consultant

In the day-to-day operation of plants that produce mixed concrete and concrete products of every kind problems are bound to arise which affect management-labor relations. They may deal with the procedure of making time-studies, assignment of jobs, disciplinary action, transfer and promotion, or other matters involving the employee-employer relationship.

The success of your plant foremen in getting out your production is determined to a large degree by the willingness of your employees to do their jobs and eagerness to do them well. Dissatisfied employees in your plant will not contribute their best efforts.

Need Alert Foremen

If your plant foremen are to keep your production operating at a maximum efficiency, they must be alert to recognize the symptoms of employee grievances, they should try to analyze the causes that give rise to those symptoms, and of course, seek to prevent grievances from developing.

The plant employee's conduct may be his way of unwittingly showing that he has a grievance. He may show it through reduced production, poor quality work, loafing on the job, insubordination, or lack of cooperation.

It seems important for your plant foreman to recognize that, regardless of the seriousness of the problem as it may appear to him, the way the employee feels about the matter should dictate the amount of consideration to be given to a complaint. The plant foreman who gives an employee the brush-off or makes too light of the complaint is merely adding fuel to the fire.

Avoid By-Passing

In most cases, by-passing can be avoided by the plant foreman himself, through building-up in the employee mind, faith, confidence, and trust as a result of daily practice by being interested in his attitude, anticipating annoyances that are bound to crop up in any job, trying to learn the personal characteristics of different employees and their customary reaction to various circumstances on the job, as well as by exercising patience, objectivity, and some tolerance of people, even under the stress of fundamental disagreements.

It is not an easy matter for the plant foreman who has to live with the complaining employee to be wholly objective at all times in considering the problem. The plant foreman should give the employee some thoughtful attention, listen to the story without interrupting the employee, and try to keep the discussion centered on facts rather than on opinions which might give rise to argument.

Seek a Solution

Whatever the solution, it should meet criteria such as: the solution should reach the heart of the problem, it should remove the cause of the grievance, and it should have no effect upon other plant employees.

There will be times when informal discussion between plant employees and the best of foremen fail to resolve a problem. There also will be times when conditions require that some adverse personnel action be taken against the plant employee. To discourage petty complaints, establish the facts, and to keep the record straight, your plant management should see that the grievance is reduced to writing.

Improvements can be made mainly through better initial preparation of the grievance, through better conduct of hearing, and more thorough compilation of the report for plant management. Time alone will tell whether improvements can be made. However, it always is more desirable for your plant management, as a matter of principle, to handle an employee grievance directly with him than through a third outside party.

Prevent Grievances

It is not enough that the plant foreman know how to handle employee grievances as they arise. It is also necessary for him to work toward preventing them or at least reducing them to a minimum.

Today, it is common practice for disputes between plant management and labor to be arbitrated. Arbitration is a peaceful, voluntary method of settling disputes by a person chosen by the parties to the dispute.

It is used only after the parties have failed to settle the dispute themselves. After a hearing, at which both parties voluntarily submit their evidence and arguments, the arbitrator makes a decision and issues an award which the parties have voluntarily agreed in advance to accept.

Arbitration is an informal and flexible process. The parties themselves, by mutual agreement, establish their own rules of procedures, select the arbitrator or establish a method for his selection, fix time limits, define the problem or issue to be submitted, and mutually agree that within such limits the arbitrator's decision shall be final and binding.

There are two unvarying elements which must be presented in arbitration. First, the arbitrator must be

impartial. Second, there must be a final and binding decision embodying the judgment of the arbitrator, not merely an attempt to bring the parties together in their own settlement. The decision must be within the authority granted to the arbitration tribunal.

In collective-bargaining agreements, it is customary to distinguish between questions of interpretation or application of specific clauses in agreements which have already been negotiated between your plant and labor and are in force and disputes over the terms to be included in a new or renewed agreement.

The first type of arbitration is used to settle controversies that inevitably arise during the day-to-day application of the agreement to plant operations. The second type is used to settle differences over the basic terms of employment that should be covered in a new contract.

In the first instance, the arbitrator might be considered to act in a quasi-judicial capacity, passing judgment on the intent or meaning of the dispute clause or its relation to a given situation.

In the second case, the arbitrator is acting in a legislative capacity. However, the majority of collective-bargaining contracts include some provision for the arbitration of unsettled disputes.

The Cost

It is customary that the expense of the arbitrator be shared equally by the parties, but some agreements call for the losing party to bear the cost. In addition, the cost of grievance arbitration depends on these factors also—proportion of grievances which an employer and labor are unable to settle themselves, type of arbitration machinery in effect, types of cases, etc.

There are various ways in which your plant can select the arbitrator. An arbitrator should possess many important qualifications such as—impartiality, intelligence, sound judgment, ability to resist pressure tactics, well informed in the field of labor relations.

An arbitration proceeding that is carried on under the terms of an arbitration clause of a contract is started by one of the parties making a demand upon the other party to arbitrate a matter in dispute.

The first step would be to gather all material facts and accurate data. Your plant management is anxious to convince the arbitrator that *its side* of the case is the most meritorious and, this can, of course, be accomplished only after a careful study of every angle of the case.

Cases may be presented either by oral arguments or by way of written briefs. The methods used will largely depend on the nature of the case, preference of the parties, or possibly local custom.

A time limit should be specified to avoid delay in settling your plant disputes and also to prevent obstruction of the arbitration process. Arbitration, therefore, is a great step forward in the betterment of industrial relations and a sound method to solve your plant disputes.

Large bin at left stores aggregates; two bucket elevators at right deliver cement, fly ash to small silos

One Man Batches, Mixes at Warner

One man is all that's needed to run both batching and mixing operations for an average daily capacity of 1000 cu. yds. at the new Warner Co. ready mix plant in Chester, Pa.

Using a new automated "push-button" operation, materials handling and mixing equipment is controlled and operated through a central station. A key feature of the new plant is a weighing, proportioning and blending system consisting of four scales and their hoppers—one cement scale with 10,000 lb. capacity; one aggregate scale at 40,000 lbs.; a water scale with a 4,000 lb. capacity. These work with three corresponding dials, a single electronic control panel and an inventory counter.

The system, called Select-O-Weigh, weighs fine and coarse aggregates and water individually under push-button control by the operator at the control panel.

Inspector Supervises

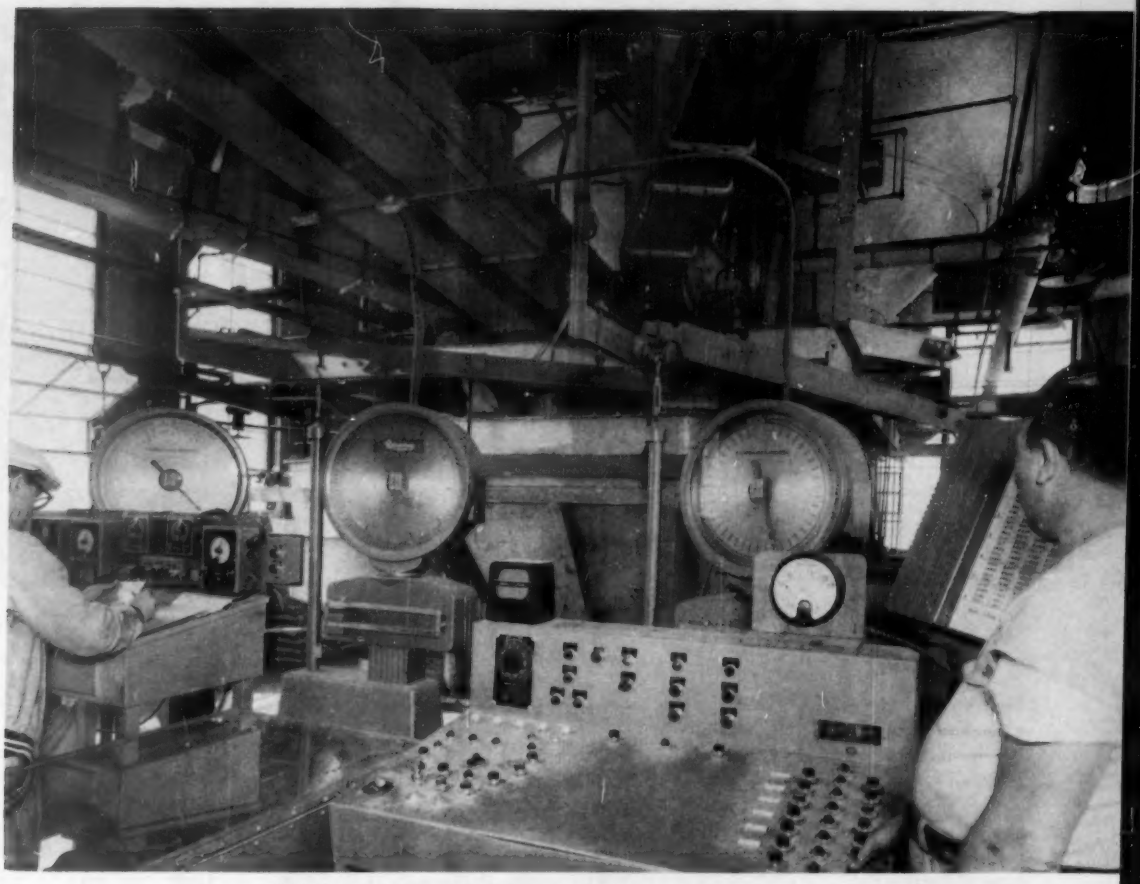
This one man controls all weighing, blending and proportioning. However, working with him is an independent inspector who supervises the processes and sees that the ready mix conforms to requirements which vary according to building codes or contract specifications. The inspector also controls the water amount added to each batch, calling out the specified amount to the operator.

This addition of water is a critical step that must be controlled to close tolerances. Factors the inspector must consider include temperature, final mixture strength, length of haul and special admixtures.

The other operator is a Warner employee. It is his job to weigh and proportion the various other ingredients, using master formula reference charts. This is done at the panel by means of a weight selector dial for cement and appropriate pushbuttons for other materials.

The system was designed and supplied by Richardson Scale Co. Here's how it works:

First, coarse and fine aggregates, including fly ash, are weighed and proportioned in the aggregate scales. At the same time, cement is weighed in another scale (regulations require that cement be weighed in a separate



Weighing, proportioning and blending of ingredients is controlled by panel at right in the Select-O-Weigh system used at Warners. Cement silo discharges into conveyor leading to scale, and weighs by inventory counter.

scale). As this takes place, the amount of cement added is recorded by the inventory counter.

Water is weighed out in a third scale, introduced, and the entire batch is discharged by gravity into the mixer. The mixture is then gravity-fed into the waiting trucks.

Since the system is automatic and geared to high volume, raw material storage capacity must be sufficient to permit continuous operation. Efficient materials handling, therefore, was an important consideration in the desgin of the new plant.

Conveying the various incoming materials to storage was complicated by the necessity of segregating each from the other. Another factor was the type of delivery. Rail, highway and river facilities all are used. Therefore, three different systems were needed: one each for cement, fly ash and aggregates.

Cement Handling

Cement arrives at the plant in covered hopper bottom railway cars. These cars dump their contents into an underground hopper beneath the rail siding where it is then carried by a screw conveyor to another hopper at the base of a bucket elevator.

This bucket elevator carries the cement 75 ft. vertically to the material inlet of the 10-in. Fuller-Huron Airslide fluidizing conveying system which serves four large silos atop the mixing plant. This fluidizing conveyor, since it is totally enclosed and has no moving parts, is especially suited for the handling of fine powdery materials.

The F-H Airslide conveying system delivers cement to each silo by means of short branch conveyors. Each silo is connected to the conveying system by air-operated side discharge valves. Delivery of the cement to the pre-selecter silo is controlled by the operator at the unloading point. He pre-sets by remote control the combination of valves required for desired channeling.

The Airslide fluidizing conveyor, made by the Fuller Co., consists of parallel upper and lower chambers separated by a special gas-permeable diaphragm. Air under low pressure, which passes from the lower chamber through the diaphragm, partially

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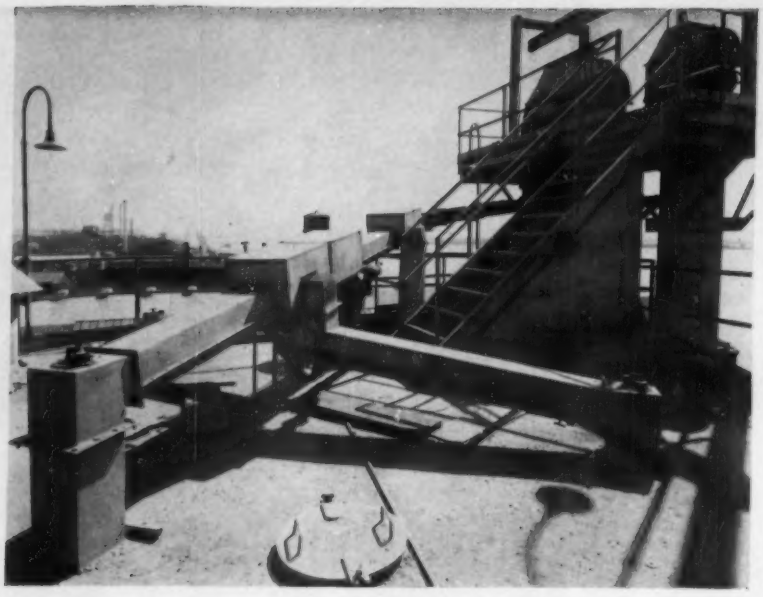


Airslide conveyor distributes incoming cement to three silos

Warner's Plant

Continued

fluidizes the material in the upper chamber, reducing friction and giving it some of the characteristics of a liquid so that it flows by gravity on a slightly downward pitch of about 8°. Low pressure air for fluidization is supplied by a 400 cfm fan-type blower.

Fly Ash Handling

Fly ash arrives at the plant in semi-trailer trucks, and is unloaded into the hopper of a bucket elevator by means of another Airslide system built into the truck body. This conveyor is located at the bottom of the truck body in which the fly ash is contained.

The driver, when unloading, simply connects the end of the conveyor to the hopper by means of a flexible port, turns on the air supply, and opens the discharge gates in the truck body. Normally, a 35,000-lb. truck can be unloaded in 30 minutes.

The bucket elevator carries the fly ash to the top of the fourth silo adjacent to the cement silos where it enters through a fixed inlet pipe.

Aggregates, mainly sand, stones and pebbles, arrive by Warner Co. barges on the Delaware River close to the plant. These materials, unloaded by crane, are brought by an overhead belt conveyor to the plant, where they are stored in a multi-compartment bin adjacent to the four cement and fly ash silos.

The second phase of the materials handling problem comes in the actual ready-mix process where a continuous supply of cement, fly ash and aggregates must be available for use.

The aggregate storage bin is located directly over the aggregate scale so these materials discharge by gravity through an air-operated clamshell gate into the scale on command from the operator of the panel.

Another Conveying System

Cement and fly ash, however, are stored in the four silos and are remote from the scales. To transport these materials automatically to the scales when needed, another conveying system is used. It consists of four 12-in. conveyors. Three feed cement automatically to the cement scale. The other is normally used to feed fly ash, under push-button control, to the aggregate scale.

However, by means of a by-pass on this conveyor, it can also be used to feed cement automatically to the cement scale should that particular silo alternately be used for cement storage. The control system, by means of a weight selector dial, automatically controls the cut-off of the cement feed to the cement scale at the pre-selected weight. The conveyors handle cement at a maximum of 2000 cu. ft. per hour.

The automated weighing, proportioning and blending system, in conjunction with efficient handling of all materials, has brought several significant benefits to the Warner Co.

Only one man is needed to run the batching and mixing operations at a maximum capacity of 150 cu. yd. per hour. Also, he need only manipulate the various controls to maintain a steady rate of production.

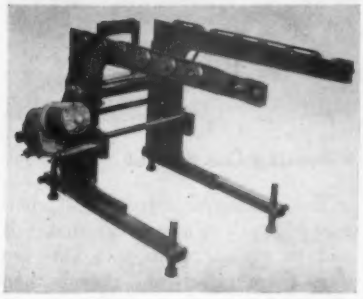
Flexibility of formula changeover is also highly important. Because contractors specifications may call for any one of a number of different ready-mix proportions, dialing of cement weights cuts down on the possibility of errors and insures continual reproducibility of batches. Changeover, too, is simply a matter of dialing the new requirements.

Speed of operation is vital when 34 trucks averaging 6.5 cu. yd. apiece must be served daily. The role of the Airslide fluidizing conveyors in providing cement and fly ash continually from remote silos is important to maintain the efficiency of this operation. Waiting time between batches is held to a minimum.

And finally, the network of controls and checks built into the system assures ready-mix product quality. This was one of the primary reasons for the installation.

What's New in

EQUIPMENT and MATERIALS



Powered Block Delivery Conveyor

Besser has introduced a new powered block delivery conveyor that is a sturdy, compact one-piece, self-driven unit designed for rear pallet feed machines with or without side pallet returns.

The powered conveyor stands independent of the block machine so no vibration is transmitted to the conveyor itself.

A continuously operating motor and reducer drives a short section of V-belts which accept the pallets of block from the conveyor chains. These pallets are pushed onto and along a section of free turning V-belts into proper position for off-bearing two at a time. All gaps between pallets are eliminated.

Adjustable legs raise or lower the conveyor on any floor surface.

Besser Co., Alpena, Mich.

Enter A40 on Inquiry Card

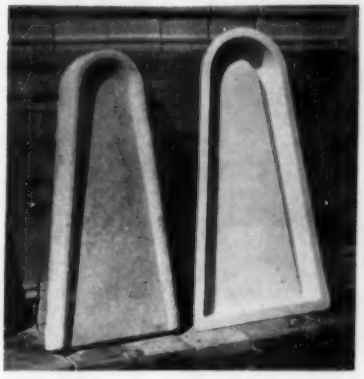
Coated, Non-Bond Tendons for Prestress

A new technical-sales folder describing the features of Coated Non-Bonding Tendons for prestressed, post-tensioned concrete is now available.

The folder shows pictures and diagrams of tendon placement in forms and how Prescon tendons are coated and wrapped to protect against corrosion and to reduce friction in tensioning.

The bulletin, "Economy Through Coated, Non-Bonding Tendons", is available from Prescon Corp., Box 4186, Corpus Christi, Tex.

Enter A41 on Inquiry Card



Fiberglas Forms For Easier Stripping

A line of new concrete product forms, made of reinforced fiberglas, are said to allow much easier stripping of pre-cast products.

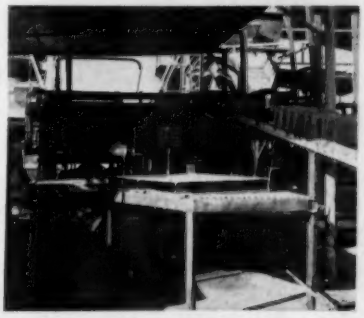
Made by Zeidler Concrete Products Co. for their own use originally, Zeidler reports that some of the original forms are still in use after more than 300 casts. The forms are lightweight, easily handled by one man, resistant to acid and alkali, allow intricate designs, and are sturdy enough to stand up under rough usage.

Forms are available for splash blocks, bottled gas platforms, hog troughs, chimney corners and in custom designs.

Zeidler Concrete Products Co., Clear Lake, Iowa.

Enter A42 on Inquiry Card

One Man Block Plant Has Three Unit Operation



A one man block plant operation is now being introduced to the market by Clanton Corp. The Clanton Component Method for block plant automation is composed of three separate units designed to automate each phase of block production.

First stage is an "Auto-Loader", an automatic off-bearer and rack loader that's timed to the block machine's operating speed, thus eliminating any manual handling of block.

The next step, following curing, is the "Auto-Rack", an automatic rack unloader and restacking conveyor custom-made for adaptation to standard plant facilities and present rack handling devices.

Final phase is the "Auto-Cube" (pictured above) which is either a semi-automatic or fully automatic block handling machine that properly cubes and palletizes any size or shape of block. With the semi-automatic arrangement, one man is needed to complete the cubing operation.

All equipment is timed to the block machine cycle. The unit was designed so that all three phases could be put in at once, or any one of the three parts can be installed individually.

Clanton Corp., Pacoima, Calif.

Enter A43 on Inquiry Card

EQUIPMENT & MATERIALS

Thermoflector Insulated Block

Savings of up to 45% of wall costs are said to be possible with use of Thermoflector insulated concrete block. These savings, by building and insulating in one operation, come by elimination of extra labor for furring, lathing and tacking up insulation and the materials cost.

Patents for the triple wall building block, with staggered air cells and sealed in aluminum foil insulation, have been granted to Thermoflector Associates, Inc., of North Sioux City, S. D. This firm is now franchising local block manufacturers across the country.

As can be seen in the picture, the aluminum strips are placed in the cells. Advantages of the block are, aside from wall cost, said to come in lowered heating costs, ending of damp interiors and basements, and reduced noise. The block are made in all units available in standard concrete block.

The aluminum foil insulators, sealed in as the wall is built, reflect back in the direction of the heat source up to 95% of the radiant heat rays that try to pass through the wall.

Conducted heat, Thermoflector reports, that tries to follow the webs through the block is baffled by the staggered air cells.

Enter A44 on Inquiry Card

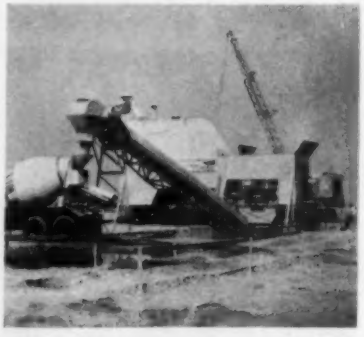
Zinc Coating For Rust Prevention

A zinc liquid, called Drygalv, to be applied by brush or spray for prevention of rust and corrosion on ferrous metals and welded joints is now available. According to a new bulletin, one gallon of Drygalv protects 400 sq. ft. of surface with a film that's 95% metallic zinc; that this film provides complete cathodic protection even against salt water.

The product dries to the touch in 15-30 minutes and can be painted over, if color is desired, within 8 hours. Product requires no heat for use.

American Solder & Flux Co., 19th & Willard Sts., Philadelphia 40.

Enter A45 on Inquiry Card



Batching Plant On Wheels

Use of a new batching plant on wheels is claimed to open new ready mix markets in construction areas too small to warrant a stationary batch plant.

Such a job has recently been done by Mountain Ready Mix, whose main office is in Fullerton, Calif. They transported a Noble-Mobile batching plant from an AFB runway paving job at Oxnard, Calif., to Long Beach, Calif. for construction of commercial and residential building in that area.

The portable plant is currently batching up to 100 cu. yds. per hour of transit mix concrete for a 15,000 cu. yd. boat marina job in Long Beach. The Long Beach ready mix operation is one of twelve maintained by Mountain Ready Mix.

The batching equipment is made by Noble Co., 1860 7th St., in Oakland, Calif.

Enter A46 on Inquiry Card

Vibrating Car Shaker

The improved Syntron "Unbalanced-Motor" vibrating car shaker is said to empty rail hopper cars ten times more quickly and cheaply than manual labor.

The improved features are reported to make the shaker less cumbersome, provide for better concentration of weight and increased car contact area to better utilize the power of vibration. The new models are also said to be more quickly and easily adjustable to different size cars. The unit is hung on the side of the car so that vibrations are transmitted all through the car; cars need not be uncoupled.

The 4 hp motor provides 850 vibrations per minute. The shaker is hung on the side of the car by a hoist or crane and fastened underneath by a chain and hook to the center beam of the car.

Syntron Co., 324 Lexington Ave., Homer City, Pa.

Enter A47 on Inquiry Card

Batch Plant Booklet

Specifications on the new Heltzel "Unitized" combination batching plant are published in a new pamphlet. The booklet describes how the new plant goes together in 8 steps, taking only two or three hours to set-up. Also described is their traveling batch chute which converts the plant from ready mix to dry batch.

Heltzel Steel Form & Iron Co., Warren, Ohio.

Enter A48 on Inquiry Card

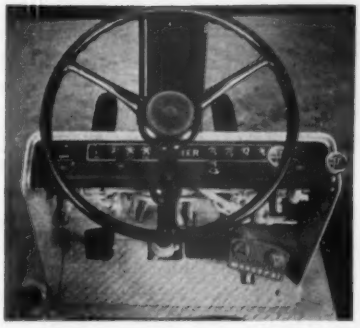
Syntron Feeder Controls

Development of new controls for Syntron feeders has been announced with the new controls providing continuous, stepless variable feeding rate adjustments from nothing to 100% capacity.

The controls are reported to provide instantaneous feed rate variation. They now are standard equipment for Syntron's line of electromagnetically vibrated feeders, capacities from 500 tph up. They also are available for feeders already in use in plants.

Syntron Co., 324 Lexington Ave., Homer City, Pa.

Enter A49 on Inquiry Card



New Foot Control Pedal Used By Hyster

Monotrol is the name used for new one-pedal control of throttle and forward-reverse direction control in Hyster fork lift trucks. Use of the one-foot pedal control operation thus allows the truck operator free use of hands for steering and load handling control.

Dashboard push buttons for "park" and "drive" govern an automatic parking brake and engagement of the automatic transmission. Other features include a safety starting switch that won't let the engine start unless the "park" button is down, and a left-foot inching-brake pedal.

Monotrol is available on the new line of SpaceSaver 30, 40 and 50 lift trucks equipped with Power-Shift Hystamatic transmission.

Hyster Co., 1003 Myers St., Danville, Ill.

Enter A50 on Inquiry Card

Automatic Mix Control

A new automatic mixture control for concrete products is described in detail in a booklet from Helco. The control is designed to replace the operator now required to regulate the mixing cycle. Both manual and automatic operation of the Helco Auto-Mix are told in detail.

Heltzel Steel Form & Iron Co., Warren, Ohio.

Enter A51 on Inquiry Card

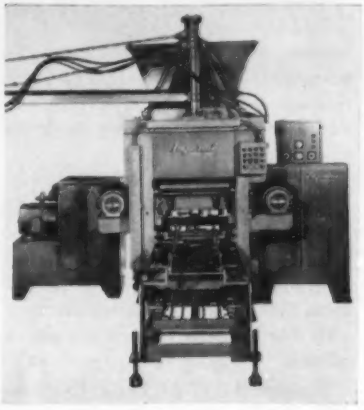
Lithibar Introduces New Imperial Machine

A new Imperial series 400 hydraulic block machine is being made by Lithibar in three models to manufacture one, two and a half, and three block of 8" equivalent.

There are fourteen new features, all told, of the Imperial with improved design, increased weight or use of cast steel not included as part of these fourteen features.

The completely new hydraulic system has as its heart a hydraulic power unit which contains virtually all components except the cylinders. The 30 gpm constant control pump, together with valves, oil filter, piston type accumulator and pressure gauge, are enclosed in a dust-tight heavy steel cabinet. The JIC tank has 50 gallon capacity; oil is heated or cooled by a thermostatically controlled heat exchanger, or by an immersion heater.

Mold box vibration is done by two electric motors, one on each side of the mold box, with Warner electric brakes to drive and stop the vibrator shaft through three matched V-belts.



The vibration system is designed to allow easy adjustment to various aggregates and mixes.

The electrical system features dust-tight housing in a steel cabinet that can be locked; sealed heavy duty limit switches.

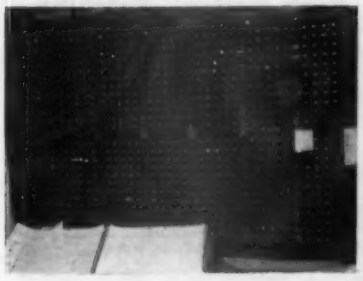
Completely new guiding has been provided for both pallet support and stripper members to obtain perfect positioning of the pallet under the mold, proper alignment of stripper in mold box, and accurate stripping of block from the mold box.

Other improved features include a quick-clean feed drawer, all new pallet support assembly, greatly strengthened stripper assembly, an all-new hydraulic power offbearer unit, new control panel for individual or automatic operation of valves and controls, new automatic lubrication, improved 12 point suspension of the mold box for faster mold changing and improved vibration, automatic indicator lights for the energized part of the electrical circuit, new feed drawer control that automatically controls the time the feed drawer remains over the mold, and new hydraulically operated front pallet feeder.

Lith-I-Bar Co., Holland, Mich.

Enter A52 on Inquiry Card

Acme Panel Shows Truck Movements



More and more common in the industry are panel boards showing truck fleet operations, with lights indicating just where each truck is and what it's doing at any given time.

Such a panel board operation is used at Acme Concrete Co., in Miami, Fla. Simpler in operation that would seem to be indicated by the complex boards, here's how they work at Acme:

The panel in the top photo shows the location of the truck, with each of four lights by the truck number showing whether the truck has left the yard, when it's on the jobsite, when it's returning to the yard, and when it's in the yard.

The bottom photo shows the master control panel that operates the light arrangement. Each switch represents a truck, with four positions to each switch, one for each of the above mentioned truck locations. By turning each knob to proper position, the truck location panel in the dispatcher's office lets the dispatcher know exactly where each truck is and what it's doing.

Trucks call in by radio telephone as they move about the area, so the panel is kept up-to-the minute on locations.

The system is said to greatly simplify the dispatching job and permits one man to handle the task with a minimum amount of confusion, according to Mike Zorovich, of Acme.

Engineered Equipment Rebuilds After Fire

Temporary office facilities and leased manufacturing facilities have been set up, following a fire, at Engineered Equipment Co., Waterloo, Iowa.

Production was resumed almost immediately following the fire, on April 18, that badly damaged both office building and factory, Pres. George E. Loveall Sr. reports.

The temporary office was set up at 420 W. 11th St., using the same phone number and post office box. With crews already at work rebuilding, Engineered Equipment will soon be operating at their regular quarters.

Loveall pointed out that all current business mail and correspondence was destroyed and asked that anyone who had recently sent an inquiry or letter for product information please mail another request.

Vermiculite Meeting Reports on New Waterproof Masonry Fill

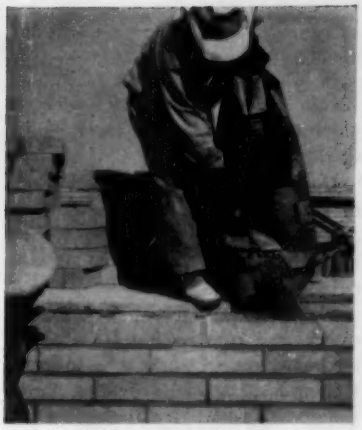
Reports on technical advances and new market opportunities for vermiculite products highlighted the 18th annual meeting of Vermiculite Institute of Chicago, held April 4 through 9 at Boca Raton, Fla.

Of special interest to the concrete industry is a new product: Vermiculite masonry fill, the result of 10 years of research. The fill is made water-repellent by a patented spraying process that coats the granules with a waterproofing compound. Like untreated vermiculite, it flows freely from the bag and can be quickly installed by pouring directly into cavities or the cores of blocks.

The product has passed the severe test developed by the National Bureau of Standards in BMS Report 82. A masonry cavity wall, deliberately built to leak, was filled with 2½" of water-repellent vermiculite. For six days (144 hours) from 5½" to 7½" of water was driven against the wall by a 50 to 75 m.p.h. wind. During the entire period of the test, no water permeated across the cavity space through the vermiculite. The tests were conducted by the Structural Clay Products Research Foundation, and the fill has been approved by SCPI.

Low Cost Solution

J. A. Kelley, president of Zonolite Co., Chicago, told the convention that the new product is the low cost solution to insulating walls where moisture or condensation may be a problem. A block or cavity wall can be insulated for about 10c per sq. ft., compared with 25c to 32c for other insulation methods, he said. Tests of twin constructions (one with masonry fill and one without insulation) showed that the new fill reduces heat



loss by as much as 60 per cent, Kelley stated.

"There is a substantial saving in the cost of heating or cooling a building, and it is also possible to use smaller and less costly air conditioning equipment," he added.

The insulated wall will take an 11 to 13 per cent humidity increase in the basement before condensation will occur, he said.

Guest speaker Walter W. Underwood, executive director of the Na-

Continued on next page

tional Concrete Masonry Assn., Chicago, welcomed the new fill as an aid in the industry's current campaign to obtain a larger share of the market.

Harry B. Zackrison, chief, engineering division, Army Corps of Engineers, Washington, D. C., expressed interest in treated vermiculite for cavity walls.

"It is our present policy to use cavity wall construction right across the board, except where moisture control or heat control is not of major importance," he asserted. "Coated vermiculite in cavity walls has definite possibilities."

The market for vermiculite acoustical plaster in prestressed concrete construction was discussed by C. A. Pratt, vice president of Western Mineral Products Co., Minneapolis, Minn.

"Prestressed concrete, being new, is subject to proof of fire resistance," he said. "One prestressed unit with a minimum cover of 2" for all reinforcing steel recently passed the two-hour test at Underwriters' Laboratories except for heat transmission through the center of the slab. It was approved with the provision that 3" of structural concrete or its equivalent in resistance to heat transmission be applied over the top.

"In order to qualify for a two-hour rating, the prestressed manufacturer has the alternative of beefing up his section, making it more expensive and difficult to handle, or adding fire protection such as vermiculite acoustic. Unquestionably, all existing prestressed sections could be made to qualify for a two, three, or even a four-hour rating by the simple addition of vermiculite acoustic to the under side. This has been demonstrated by the work done in qualifying steel construction for such ratings. The benefits to be gained from sound absorption and improved appearance from the application of acoustic to prestressed concrete also increase the sales opportunities for this type of construction."

W. V. Culver, secretary-manager of Vermiculite-Northwest, Inc., at Seattle, Wash., was elected president of the institute to succeed J. Brooks Robinson of Great Falls, Mont.

Three new directors were named: Jack Lyall, president of Southwest Vermiculite Co., Albuquerque, N. M., R. W. Sterrett, vice president of Zonolite Co., Chicago, and L. J. Venard, president, Western Mineral Products Co., Minneapolis, Minn.

Edward R. Murphy and Walter J. Bein were returned as managing director and as treasurer, respectively.

Two Syntron Appointments

Syntron Co. has announced that Edward A. Thoma has been appointed to the position of vibratory feeder sales engineer. Thoma, a Pittsburgh native, will relocate to Indiana, Pa., with his responsibilities including engineering of the line of feeders, flow control valves and hopper level switches.

Albert G. Neumayer has been appointed to a similar position as vibrating screen sales engineer for Syntron.

Hiways Are Best Buy, AGC Man Tells Congress

Highway construction is probably the best buy the public gets for its tax money at the present time, a spokesman for the Associated General Contractors of America recently told the House Public Works Committee.

M. Clare Miller, president of the San Ore Construction Company, McPherson, Kan., presented testimony for the AGC in support of a bill by Rep. George H. Fallon (D-Md.) to continue the accelerated federal-aid highway program at its current pace.

The bill (H.R. 5950) would extend Congressional approval of the present estimated cost of completing the interstate system for an additional year, through the fiscal year 1962, to permit prompt apportionment of federal-aid funds, and would increase the authorization for the interstate system for fiscal 1962 from $2.2 billion to $2.5 billion, the same as the amount already authorized for fiscal 1961.

Miller told the committee that bid prices on federal-aid highway construction are stable, and that there are no shortages of material, equipment or personnel to delay construction. Despite the fact that 25 per cent more highway construction was awarded in 1958 than in 1957, he said, the capacity of the highway contracting industry has actually increased, along with increasing competition.

He cited figures recently released by Federal Highway Administrator Bertram D. Tallamy showing that the Bureau of Public Roads index of average bid prices for federal-aid highway construction in the first quarter of 1959 had decreased 0.6 per cent from the preceding quarter and had increased only 0.3 per cent in the entire previous year, despite much greater increases in component costs.

Miller noted that during the past year wage rates on highway construction, excluding fringe benefits, have increased approximately 4.5 per cent, and the cost of construction machinery has increased about 3.4 per cent, while material costs generally have not changed.

New Name for Lackey

Mix-Mizer Inc. will be the new name for W. H. Lackey Inc., a Kingsport, Tenn., firm that designs, develops and manufactures Mix-Mizer automatic electric mixing and batching controls for concrete block and pipe mixes.

Leon Munroe, plant general manager of the company, says the name change is intended to make identification easier for promotional purposes.

New Worthington Manager in Boston

Charles D. Wood has been appointed district office manager for Worthington Corp. at Boston, Mass., succeeding Richard M. Cleveland who's retiring June 30. Wood has been in the office prior to the appointment. Cleveland retires after 42 years with Worthington.

Dodson's Digest

LET GEORGE DO IT

My friend George Matthews is a do-it-yourself bug. Wallpapering. Plumbing. Wiring. You name it . . . George knows all the answers. And his usual remark is, "Any fool can do it." To tell you the truth, George has always made me feel just a little bit inadequate.

But I paid George a visit a couple of weeks ago, and it did my ego a world of good. The steps to his front door were gone . . . and I thought to myself, "Here's my chance to tell *George* how to do something."

"Hey," I shouted, "lower the drawbridge."

"Come around to the back door," he called back.

First thing I said when I saw him was, "You need some front steps."

"You don't say!" he answered.

"Considered concrete?" I asked.

"Plan on it," he said.

"Well now, George, let me give you a helpful hint. Don't use a mix without Calcium Chloride."

"Got it on my list, Dod," he said.

"Your steps will set twice as fast," I continued, "and . . . "

"Depends on how much Calcium Chloride you use," he broke in.

"Well, a pound per bag of cement is pretty standard when the temperature is above seventy," I told him.

"I've worked a much better proportion, Dod," George said.

Maybe he had, but he never got a chance to tell me about it, because right then a truck pulled up behind my car in the drive. "You the guy who ordered these pre-cast steps?" the driver bellowed.

— L. D. Dodson

P.S. — Our booklet, "How To Make Better Concrete Products and Ready Mix" is filled with helpful hints. Write for your copy. *Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.*

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3 Jaegers—two to four yd. capacity—$300.00 each.
2 Smiths—three to four yd. capacity—$300.00 each.
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CONCRETE TRANSPORT MIXER CO.
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PLAIN PALLET BLOCK MACHINE FOR SALE

We have recently taken several Fleming-180 Automat'c Block Machines on trade. They are being offered for sale at $1200—$1600 complete. For DETAILED information contact:

FLEMING MANUFACTURING COMPANY
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FOR SALE

Sixty-five used steel racks, 72-block, size of pallets 18 x 20, one to three years old. One factory rebuilt Truck Man in excellent condition, large motor.

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Stearns #7 & 9 Jaltcrete.....	$ 500.00	each
(Jaltcrete owners at this price buy one for spare parts.)		
Mold Boxes #7 & 9	150.00	each
2 Air Offbearers Stearns #7 & 9	250.00	each
2 Hand Lift Trucks	175.00	each
1 Lithibar 2-Block Machine complete with 1000 plain steel pallets 18" x 22"	2900.00	
1 Stearns 28 cu. ft. Mixer. Good condition with motor $1000.00		
100—Racks for cored steel pallets	10.00	each
100,000 pressed steel pallets in stock (Send tracing or sample for quotation).		

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24"	1/32" x 1/32"	6.95	3.92
4 ply 32 oz. duck:			
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30"	1/32" x 1/16"	9.30	4.99

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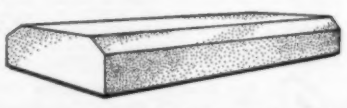

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ADVERTISER'S INDEX

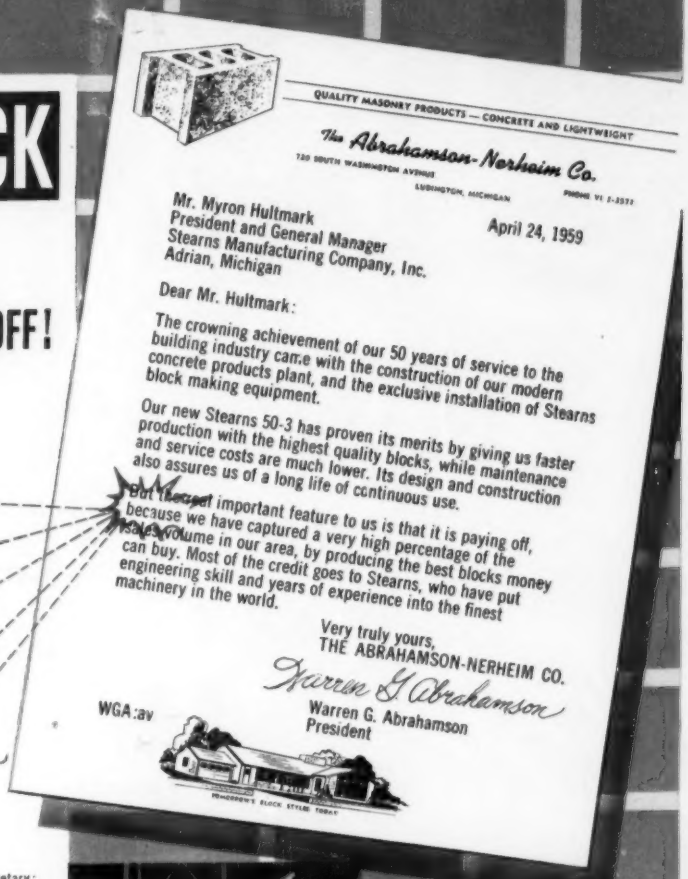
BLOCK AFTER BLOCK

STEARNS 50-3 quality PAYS OFF!

"... because we have captured a very high percentage of the sales volume in our area by producing the best blocks money can buy."

... says Warren G. Abrahamson
PRESIDENT

Left to right, W. A. Karlsen, V.P. & Secretary; W. G. Abrahamson, President; W. T. Tallefson, Treas.; The Abrahamson-Nerheim Co., Ludington, Mich.



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April 24, 1959

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President and General Manager
Stearns Manufacturing Company, Inc.
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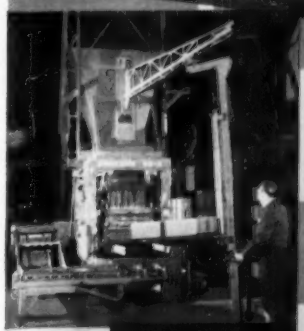
The crowning achievement of our 50 years of service to the building industry came with the construction of our modern concrete products plant, and the exclusive installation of Stearns block making equipment.

Our new Stearns 50-3 has proven its merits by giving us faster production with the highest quality blocks, while maintenance and service costs are much lower. Its design and construction also assures us of a long life of continuous use.

But the most important feature to us is that it is paying off, because we have captured a very high percentage of the sales volume in our area, by producing the best blocks money can buy. Most of the credit goes to Stearns, who have put engineering skill and years of experience into the finest machinery in the world.

Very truly yours,
THE ABRAHAMSON-NERHEIM CO.
Warren G. Abrahamson
Warren G. Abrahamson
President

WGA:av



A STEARNS 50-3 WITH OFF-BEARER AND PALLET RETURN.

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Again and again, block plant operators using Stearns equipment enthusiastically attest to increased production of quality block, lower maintenance, and most important, the resulting expanded local market for their products. The Abrahamson-Nerheim Co. is no exception.

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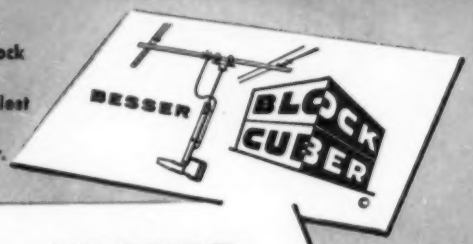
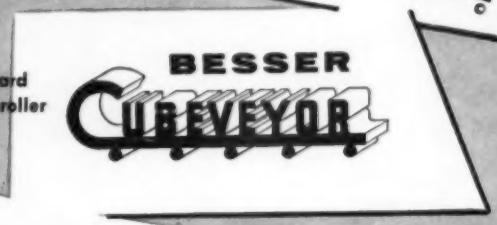
4 simple, economical ways to handle block or brick . . . *entirely by POWER!*

1 Besser Bridge Crane Block Cuber with self-cleaning cubing platform. The simplest method for lifting three 8" block (or equivalent) by power.



2 Besser Power Cubeveyor for transporting finished cube to yard via power conveyor and gravity roller conveyor through opening in wall.

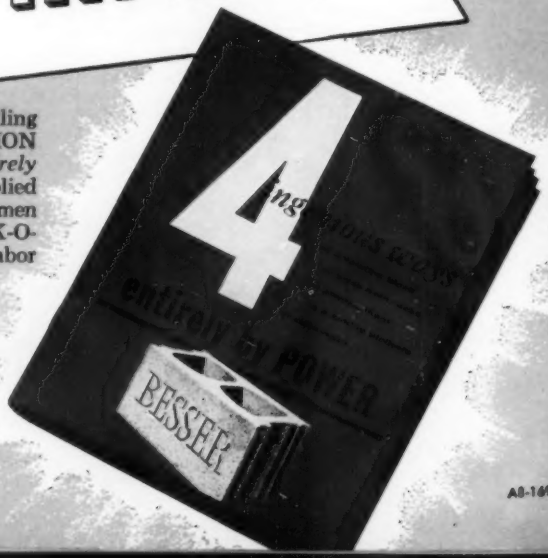


3 Besser Turn-a-Rack with large power turntable — a synchronized system for loading block, exchanging rack and cubing block, at the Vibrapac.

4 Besser Brickveyor for positioning brick for cubing. Receives brick in an upright position, then tips them over to horizontal position to make brick cubing possible.

• To meet the demand for greater efficiency and economy in handling block or brick, BESSER engineers have developed BLOCK-O-MATION — four ingenious ways by which you can handle block or brick *entirely by power*. Actually, BLOCK-O-MATION is automation as applied to block plants. The old hand method of cubing involved two men lifting as much as 320,000 pounds every day. Now — BLOCK-O-MATION eliminates this slow, heavy lifting by hand. It reduces labor costs . . . minimizes cull block . . . speeds up production.

Besser has a cubing system to fit any plant or operation. Write today for BLOCK-O-MATION Bulletin No. 128 illustrated here.



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FIRST IN CONCRETE BLOCK MACHINES

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